

# **COST EVALUATION OF COMPLEMENTARY BASIC EDUCATION PROGRAMS IN UGANDA**

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## List of Abbreviations

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ABEK	Alternative Basic education for Karamoja
BEUPA	Basic Education in Urban Poverty Areas
CBE	Complementary Basic Education Programs
CHANCE	Community Centered Alternative For Non-Formal Community Based Education
COPE	Complementary Opportunities for Basic Education
EMIS	Education Management Information System.
GoU	Government of Uganda
MNFE	Mumbende Non-Formal Education
MPES	Ministry of Education and Sports
NFE	Non Formal Education
NGOs	Non-Governmental Organization
UBOS	Uganda Bureau of Statistics.
UDES	Uganda DHS EdData Survey
UNICEF	United Nations Children’s Fund
UPE	Universal Primary Education
USAID	United States Agency for International Development

## Executive Summary

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This report attempts to estimate the cost of Complementary Basic Education (CBE) programs as they are likely to be implemented if expanded and incorporated as part of the GoU UPE policy. Costs have been grouped into three cost packages: "Low-Cost Standard," "Upgraded Standard," and "UPE Standard." The Low-Cost Standard reflects either existing program costs or reflects the cost of administering existing programs if they had a standard of operation that is sustainable were programs to be implemented country-wide. The upgraded standard cost package estimates the costs if some component standards were raised. The UPE standard cost package uses components costs taken largely from the Klees et. al. report that estimated unit and total costs for formal UPE schools. Similarly, base population estimates were taken from the Klees et. al. report.

Five programs were examined: Mumbende Non-formal Education, COPE, CHANCE, ABEK and BEUPA. If the CBE programs are to continue and to be expanded for similar populations, they would serve three categories of children – the urban poor, rural poor communities that live and work in consolidated geographic areas and rural poor communities where the workplace is often distant from the settled community (termed "rural dispersed communities").

### **Component Costs**

Costs for CBE program components were estimated and compared to UPE unit costs and also compared across cost packages.

Instructor salaries: Instructors are typically paid US\$ 50,000 per month in CBE programs. The upgraded standard raises this pay scale to US\$ 70,000. UPE teacher costs are roughly twice that of CBE instructor costs.

Teacher training: Teacher training costs are substantially higher for the CBE programs than for regular schools.

Texts and learning materials: Although all the programs differ at least somewhat from UPE texts and curriculum, for purposes of costing, it was assumed that final text and learning material costs would be no greater than that of such materials used in UPE schools.

Community Development: There is strong anecdotal evidence that many or all of the CBE programs serve a community development function. Most of the expenditures grouped here were for meetings with community members (or among different communities) or were to support community management committee work.

Supervision and monitoring: Programs were highly diverse in how centers were monitored and how such costs were accounted for. Estimates reveal ABEK costs to be much higher than other programs due to the distances involved and the nature of the populations and centers that need outside input and monitoring. Not included in these supervision expenditure estimates is the value of community supervision for these centers. In nearly all programs, communities provide play a significant role in monitoring their centers.

Management: CBE programs have relatively large management costs and, once again, the challenge was to use existing expenditures to estimate costs of the programs were they to be nationally sanctioned and, likely to have similar outcome standards of management.

Classrooms and land: The existing expenditures on classrooms vary widely among CBE programs. Estimated costs for this component assumed that, in a nationally expanded scenario, a common standard might be applied. Some programs informally suggested that land would continue to be freely available (ABEK) while other programs indicated that land was a growing constraint for program expansion (BEUPA). Thus, the cost of land was included in the upgraded construction costs estimated here.

Initial and start-up costs: All programs had considerable start-up costs. These costs typically included community sensitization, community, instructor and supervisor training and some capital costs. An assumption was made that programs were currently spending adequate amounts on start-up activities and capital investments and, therefore, would continue to face similar costs in any nationally expanded scenario.

Although some costs far exceed those for estimated for UPE schools, the most expensive components – teacher salaries and construction costs, are cheaper for CBE programs than for UPE schools. Texts and learning materials are estimated to be higher than estimated UPE formal schools costs reported in the draft Klees et. al. report. Instructor salaries fall far below similar salaries for UPE formal school teachers. Training costs can be up to seven and half times higher to some CBE programs (notably AB EK) than for UPE schools. Although high, these training costs comprise a relatively small share of CBE center costs and, thus, subtotals for this category are largely in line with overall UPE formal school costs in this category. Initial training is more expensive in AB EK centers than it is for UPE schools by a small factor (about 20 percent more expensive). Table I summarizes cost components across programs and cost packages. Overall, CBE program unit costs were comparable to UPE unit costs on a per-student and per-center costs basis.

### **Budgetary Impact**

Cost components were multiplied by student and center estimates in order to assess overall MOES budgetary impact. On an average unit cost basis, UPE costs are about the same as those estimated for CBE upgraded standards. Taken as a whole and using expanded scenario assumptions integrated here, CBE programs ought to be no more expensive than were these students to attend UPE schools. Nevertheless, were program policies, procedures or management to change, affecting components costs, overall costs could change relative to UPE formal school costs. Klees et. al assesses total UPE cost impacts on MOES and national budgets.

### **Opportunity Costs**

Opportunity costs for CBE populations are high – a large factor in children's inability to attend regular UPE schools. These costs are particularly high for girls. In a household survey, virtually every female child not in school had domestic responsibilities that impeded school attendance. Further, a substantially larger portion of females took on outside employment than males. Judging from the numbers, among males, only rural residents seem to face opportunity cost constraints to formal schooling. Overall, opportunity costs of school attendance appear to be very high for this out-of-school population.

Perceived value of school responses to a household survey indicate that many former students had lost interest in schooling. The possibility that schooling may not lead to jobs was not a reason to leave (or never attend) school for any of these populations. When this data was looked at specifically for Karamajong populations, nearly a quarter of all household indicated that school's lack of importance was a reason for children not attending school.

## **Outcomes**

Although CBE programs target children who would not otherwise attend school, it is likely that at least part of the success or failure of these programs will be gauged along lines traditionally emphasized for formal schools. In some cases, this emphasis might have validity. Programs such as COPE and CHANCE use the UPE school curriculum with the explicit idea of facilitating student transfers to UPE schools whereas ABEK does not.

Nevertheless, it is hard to make sense of numbers such as reported dropout rates. Inconsistent attendance cannot necessarily be taken as a weakness of the program and dropout rates are generally not a valid measure of effectiveness for the programs.

Girls are both disproportionately benefited by the programs (comprising slightly more than half of all CBE students) and disproportionately disadvantaged for schooling among these populations. Girls' household labor is highly valued at an early age, often providing labor whose opportunity costs swamp the perceived benefits of schooling.

It may be possible to integrate CBE programs into the regular EMIS work undertaken by the MOES. At a minimum, EMIS functions of tabulating and aggregating enrollments, teacher numbers and classroom numbers ought to include these programs.

## **Community Benefits**

Communities have gained non-quantitative benefits from CBE schools – additional life skills, communication and interpersonal skills and, better living conditions in their homes. Overall the communities report an improvement in the quality of their life. A major, though certainly not intended result of all the programmes, has been the empowerment of whole communities.

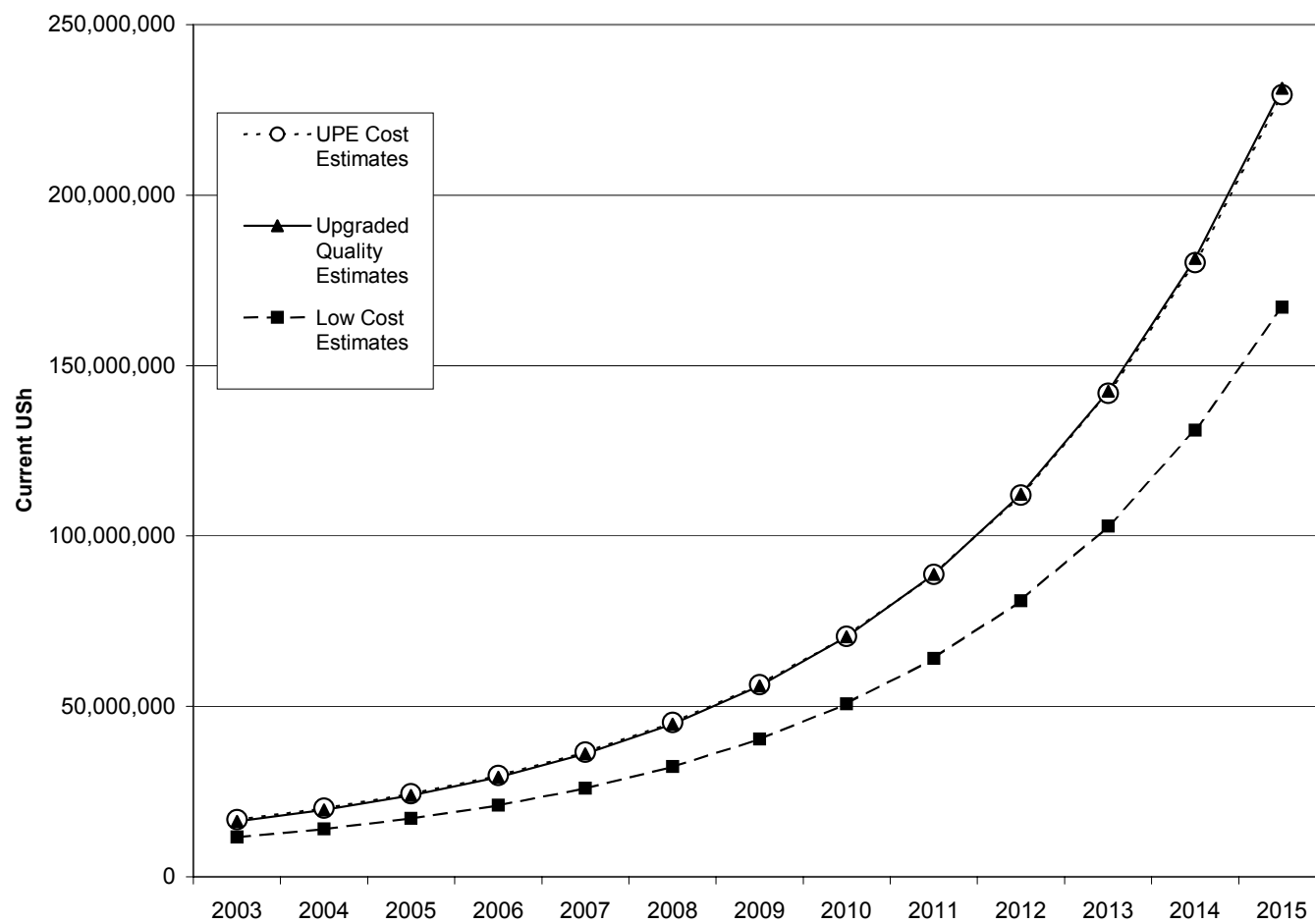
The Community Project Chairpersons (CPCs) and councilors (BEUPA), management committee members (CHANCE), village or district council members (ABEK) talk about their roles and responsibilities and the changes in the centres since inception with evident pride and confidence. It is clear that they are not only committed to the project but also value their relationship with it as a source of identity, even prestige. The communities show good evidence of their ownership of the programmes. All in all it may be said that the programmes exhibit a relationship with the communities that is quite rare in the case of regular schools.

Table I: Comparisons of Costs Across Programs and Components

	rural consolidated communities			urban poor communities			rural dispersed communities		
	Low cost option	Upgraded standard	UPE standard	Low cost option	Upgraded standard	UPE standard	Low cost option	Upgraded standard	UPE standard
<b>Recurrent calculated per student</b>									
Texts and learning materials	3,400	9,400	4,010	3,400	9,400	4,010	3,400	9,400	4,010
instructor salaries	13,333	18,667	30,000	13,333	18,667	30,000	13,333	18,667	30,000
<i>subtotal - p/stud recurrent</i>	<i>16,733</i>	<i>28,067</i>	<i>34,010</i>	<i>16,733</i>	<i>28,067</i>	<i>34,010</i>	<i>16,733</i>	<i>28,067</i>	<i>34,010</i>
<b>Recurrent calculated per center</b>									
Supervision and monitoring	31,246	62,492	110,492	35,746	62,492	110,492	163,337	163,337	110,492
On-going community dev't	110,873	110,873	0	110,873	110,873	0	341,082	341,082	0
On-going Teacher Training	416,910	416,910	130,040	672,238	672,238	144,667	920,390	920,390	124,000
Other management	448,398	448,398	633,198	831,960	831,960	633,198	353,715	353,715	633,198
<i>subtotal - p/center recurrent</i>	<i>1,007,427</i>	<i>1,038,673</i>	<i>873,731</i>	<i>1,650,817</i>	<i>1,677,564</i>	<i>888,357</i>	<i>1,778,524</i>	<i>1,778,524</i>	<i>867,691</i>
<b>Development calculated by center</b>									
Construction, land & furniture	8,389,685	13,860,711	17,828,080	9,333,333	15,419,725	19,833,333	8,000,000	13,216,907	17,000,000
start-up; needs assessment	2,500,000	2,500,000	0	1,899,500	1,899,500	0	1,347,837	1,347,837	0
Initial training	2,500,000	2,500,000	3,259,992	2,783,333	2,783,333	3,626,667	3,666,291	3,666,291	3,108,571
<i>subtotal - p/center development</i>	<i>13,389,685</i>	<i>18,860,711</i>	<i>21,088,072</i>	<i>14,016,167</i>	<i>20,102,558</i>	<i>23,460,000</i>	<i>13,014,128</i>	<i>18,231,035</i>	<i>20,108,571</i>



**Figure I: Unit Costs of CBE Programs Compared to UPE School Unit Costs**



# Cost of Expanding Complementary Basic Education Programs

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## **Methodology**

### **Assessing costs for the future**

Costs estimated here derived from actual costs to existing programs. The estimated costs, however, differ from budgeted costs. This is true for many reasons, but principally because

1. Many costs are off-budget. The community or parents absorb some costs. Others costs are paid for by sources other than the official funding organizations. For example, the MOES picks up the cost of ABEK instructors so such costs are not reflected in recent ABEK budgets. District personnel often perform monitoring and supervision. Sometimes they are compensated directly, while other times this work is considered part of their regular duties and only expenses are covered in budgets.
2. Costs for each program were generally shared among various NGOs, government agencies, the MOES and the community. Some programs have consolidated budgets that reflect all expenditures regardless of sources. Others have budgets for each funding agency. Even between agencies, budgets can be unclear as donor funding is sometimes given in-kind and directly and sometimes given in cash as a supplement to funding from other sources.

This report attempts to meld these disparate pieces and estimate the true cost of the programs as they are likely to be implemented if expanded and incorporated as part of the MOES UPE policy. This standard was used in selecting policy options to cost, in judging whether costs should be estimated on budget (i.e. taken on as official policy) or remain off budget (as with existing costs of exercise books and building maintenance; generally absorbed by households and communities at present).

Although this rule-of-thumb was used in deciding which alternatives to cost for purposes of projections, such choices are not meant as recommendations. Rather, as the document is to be used in assessing possible policy options, the choices reflect as the best guess as to policy choices most likely to be adopted. The report contains all the data necessary to assess the cost impact of other choices and sets of policies.

### **Cost packages**

Costs have been grouped into three cost packages: "Low-Cost Standard," "Upgraded Standard," and "UPE Standard."

The Low-Cost Standard reflects either existing program costs or reflects the cost of administering existing programs if they had a standard of operation that is sustainable were programs to be implemented country-wide. An example of one of these sustainable costs is textbooks and learning materials. Each program provides a different set of such materials. Some use UPE school materials. Some attempt to equip each child. Some use shared materials. In this instance, costs were estimated for texts and learning materials

targets for UPE schools. There is no assumption that these CBE schools will use UPE school materials. Rather the assumption is that the on-going unit costs of supply learning materials to CBE schools would be no greater than that of regular UPE schools.

The upgraded standard cost package estimates the costs of upgraded standards of some components of CBE programs. This is either because existing standards (for example, instructor salaries) were commonly judged to be currently low or because there was reason to believe that upgraded standards might be applied to CBE programs were they to be expanded nationally and sanctioned formally by the MOES.

The UPE standard cost package uses components costs taken largely from the Klees et. al. report that estimated unit and total costs for formal UPE schools. These cost estimates are repeated here as a means of comparing CBE program costs with those of formal UPE schools. In some cases where comparison costs were not available in the Klees et. al. report, very rough estimates were calculated – again for purposes of cost comparisons.

### **Inflation adjustments**

Generally, inflation adjustments have not been made in these estimates. Since the principal task was to evaluate CBE programs relative to UPE schools, keeping costs constant across years (i.e. assuming the value of the US\$ stays constant through years) allowed for a relatively easy comparison. The final cost projection tables, however, do include a line at the bottom which adds five percent per annum inflation to the final numbers in order to make such numbers comparable to numbers reported in the Klees et. al. report.

### ***School-Aged Population and Projections***

Population estimates were taken from the Klees et. al. report. Although there appears to be substantial variance in population estimates across sources and other estimates could have been used here, the Klees estimates were used in order that costs reported here be as comparable as possible to those reported for regular UPE schools<sup>1</sup>.

Table 1 shows these population estimates. This table breaks down the total 6-12 year old population into groupings relevant for this report (see "Characteristics and Groupings," page 4 below).

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<sup>1</sup> Many thanks to Andrew Mukulu of the Uganda Bureau of Statistics for spending an afternoon with me going over the estimates and problems with estimating such numbers given a ten year old census. He is busy at work preparing people for the upcoming census.

**Table 1: Population Estimates****Population of 6-12 year olds from UPE report (Klees, et. al. Aug. 2002)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	6,400,000	6,553,600	6,710,886	6,871,948	7,036,874	7,205,759	7,378,698	7,555,786	7,737,125	7,922,816	8,112,964	8,307,675	8,507,059	8,711,229
<b>distribution of 6-12 year olds</b>														
Rural - dispersed	181,161	185,509	189,961	194,521	199,189	203,970	208,865	213,878	219,011	224,267	229,649	235,161	240,805	246,584
Rural - consolidated	5,495,639	5,627,534	5,762,595	5,900,897	6,042,519	6,187,539	6,336,040	6,488,105	6,643,819	6,803,271	6,966,550	7,133,747	7,304,957	7,480,276
Urban poor	100,199	102,604	105,066	107,588	110,170	112,814	115,522	118,294	121,133	124,040	127,017	130,066	133,187	136,384
Other urban	1,185,722	1,214,179	1,243,319	1,273,159	1,303,715	1,335,004	1,367,044	1,399,853	1,433,450	1,467,852	1,503,081	1,539,155	1,576,094	1,613,921
Total	6,400,000	6,553,600	6,710,886	6,871,948	7,036,874	7,205,759	7,378,698	7,555,786	7,737,125	7,922,816	8,112,964	8,307,675	8,507,059	8,711,229

## Characteristics and Groupings

Five programs were examined: Mumbende Non-formal Education, COPE, CHANCE, ABEK

<b>Table 2: Program Enrollments and Ratios</b>				
	students	instructors	centers	districts
MNFE	17,312	320	127	1
COPE	11,017	354	175	9
CHANCE	2,500	58	47	1
<i>subtotal</i>	<i>30,829</i>	<i>732</i>	<i>349</i>	<i>11</i>
ABEK	21,204	392	196	2
BEUPA	3,440	126	54	1
<b>Totals</b>	<b>55,473</b>	<b>1,250</b>	<b>599</b>	<b>14</b>
	students per instructor	instructors per center	centers per district	
MNFE	54.1	2.5	127.0	
COPE	31.1	2.0	19.4	
CHANCE	43.1	1.2	47.0	
<i>subtotal</i>	<i>42.1</i>	<i>2.1</i>	<i>31.7</i>	
ABEK	54.1	2.0	98.0	
BEUPA	27.3	2.3	54.0	
<b>Averages</b>	<b>44.4</b>	<b>2.1</b>	<b>42.8</b>	

and BEUPA. At present, the five programs serve about 55,500 students (Table 2). They employ 1,250 instructors in about 600 centers in 14 districts. Students per instructor are lower than UPE schools (about 44 students per instructor) but equal target ratios for UPE schools. Centers are small – just over two classrooms per center. Some classrooms, however, are multi-grade. CHANCE, for example, attempts to cover the basic UPE curriculum in a three-year, multi-grade format.

If the CBE programs are to continue and to be expanded for like, but currently unserved populations in the country, they would serve three categories of children – the urban poor, rural poor communities that live and work in consolidated geographic areas and rural poor communities where the workplace is often distance from the settled community. In this report, such communities are referred to as “rural dispersed” communities. Because these dispersed communities are often no longer wholly nomadic, the term “nomadic” was not used.

Table 3 shows how these programs were grouped, the labels for each of these groupings and the description of communities and children these groups target. Also note that these groupings are consistent with groupings used in Table 1 (page 3) for population groupings<sup>2</sup>.

**Rural Dispersed (ABEK):** The Alternative Basic Education for Karamoja program currently operates 196 centers in two districts largely inhabited by the Karamoja people. The program is funded by Save the Children Norway (about 44 percent of the cost), UNICEF (about 40 percent of the costs) and the MOES (the remaining 16 percent of costs). The program targets children ages 6-18 although younger children are frequently brought along to the center and adults regularly sit in the classes.

**Table 3: Program Groups for Cost Evaluation**

Report label for community	Programs Costed	Description of Community School Needs
URBAN POOR COMMUNITIES	BEUPA	Poor children in Kampala who have either dropped out of school or never attended school. These children either have home lives that are unsupportive of schooling (poverty, weak parental support) or need to earn money for survival.
RURAL DISPERSED COMMUNITIES	ABEK	Karamajong children who would otherwise not access schooling. In recent past, these communities were thought to be nomadic but today are generally settled with only able-bodied males moving away from villages to graze animals. Thus, the communities are often dispersed with some members in villages while others move about the countryside. Male children are often required to take grazing animals far from village for extended periods of time. Both male and female children are integrated into livelihoods at an early age.
RURAL CONSOLIDATED COMMUNITIES	CHANCE COPE MNFE	Existing in only a few districts, the programs serve children in poor rural areas who would not otherwise be in school. Often these children live in communities that are quite distant to UPE schools. Also, children are often needed to supplement family labor – particularly girls. Schooling is required that builds around the dual schedules and lifestyles of these agricultural, pastoral and fishing communities.

These communities live largely from grazing animals. The animals are frequently moved to find grazing pastures and water. The communities, themselves, are becoming settled – moving little. Thus, whereas these communities could once accurately be labeled as nomadic, today only a portion of their population is nomadic. Even so, the nomadic nature of the men and boys work with animals means that school-aged children are frequently not consistently near a school. Often, they have to choose either schooling or work over extended periods of time. This semi-nomadic lifestyle means that the formal systems of government are not as easily accessed. As participation in schooling comes in direct conflict with livelihood, schooling is often not as valued as it is in other communities. Further, the population is quite poor – some 25 percent of those interviewed in a household survey, for example, said that they could not replace salt in their households once their supply was exhausted. They were too poor to replace the salt. Thus, the ability to continue to make a livelihood is paramount to their survival.

<sup>2</sup> For a more comprehensive description of each of these programs, see Klees et. al. (June 2002). Most of these programs also have publications detailing their goals, problems and accomplishments.

Rural Consolidated (MNFE, COPE and CHANCE): These three programs all identify the rural poor as their target group. These programs aim to provide an alternative schooling to children who have either left regular UPE schools or who have never registered. Results from the Household Survey (UBOS, 2001b) indicate that 16 percent of these children are currently not attending school. Of those not currently attending, 50 percent never attended.

The three programs target slightly different age groups but generally those between the ages of 6 and 18. Both COPE and MNFE specifically target children who have never been to school whereas CHANCE targets children in the most disadvantaged communities. Many of these communities are remote and are a long distance from the nearest UPE school. Some of these communities are pastoralists, some agriculturalist and others are fishing communities. In all of these communities, parents have traditionally integrated their children into household and livelihood labor at an early age. Thus, the opportunity costs of sending these children to school are high. The programs thus target the most disadvantaged rural communities where schooling must coexist with child labor and often where regular UPE schools are too far to access. Unlike rural dispersed communities, however, the child's work contribution to the family is often near by the school – often accommodating a day split between work and school.

Urban Poor (BEUPA): Kampala is the only urban area currently served by a CBE program. Many children in Kampala are not in school. Generally, this is not because of access. Rather, they have a number of lifestyle impediments. Sometimes, they are orphaned and either live without adults or are only partially supported by adults in another household. Sometimes this condition or urban poverty circumstances require that they earn some money each day. Further, they do not have access to the money necessary to pay the private costs of schooling. Such children need an educational program that works around their work schedule. The BEUPA centers attempt to set school hours during times when children would otherwise not be working.

BEUPA is currently funded by the MOES (about 60 percent of funding – largely for instructor salaries and construction), the Germany Government (about 34 percent of total funding) and by the Kampala City Council (about 6 percent of funding). It is expanding rapidly having begun with seven centers in 1999, expanding to 54 in 2002.

## **Demand projections**

Across the programs, there are five significant and common reasons why children are not currently in school:

- Poverty or unstable home environment
- Inaccessible UPE schools
- Need to generate income
- Inability to afford private costs of schooling
- Few perceived benefits to links with formal sector

Collectively, these problems (along with a number of lesser problems – see UBOS, 2002b) explain why these children are not attending regular UPE schools. Some of these problems are likely to remain for many years. Internationally, nearly all countries have a population that remains at poverty levels where the child's labor continues to be important for family

income. Other reasons may become less of a factor over time. Remote rural areas are likely to see new UPE schools constructed closer to home in the next several years if UPE plans move ahead. Reportedly, CBE programs are also causing a rising demand and valuing of schooling in these communities.

This report modeled likely changes in these factors over time to estimate changes in the percentage of children who would need CBE schools. Table 4 shows the resultant projections. The first set of number derives from the population projections shown in Table 1 (page 3). Within these groupings, percentages of children not currently attending UPE schools were estimated. Such estimates were taken from the UBOS EdData Set (UBOS, 2001b) or were derived from the data set using assumptions when the specific population groups were not clearly delineated.

From these estimates, target populations of children to be served by CBE programs are estimated (second set of rows). These estimates are then used to extrapolate numbers of children, instructors and centers that will be required.

Existing student: instructor ratios were maintained for this estimate. Although the ratios are lower than those for UPE schools, the CBE ratios are, at present, those that UPE schools target. Thus, maintenance of existing ratios would be within overall UPE standards and goals.

Existing instructor: center ratios were also maintained for these projections. These ratios are small compared to the sizes of most UPE schools. Nevertheless, four of the five programs estimated here are in rural areas – often remote rural areas. It is unlikely that their size can be expanded to regular UPE school sizes and still has a catchment area that is reasonable for young children to walk. Where concentrations of children allow for larger centers, there is no reason foreseen by this cost estimate, why centers could not be enlarged.



**Table 4: Complementary Program Projections for Targeted Groups**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>presumed percent out of school</b>														
Rural - dispersed	20.0%	19.4%	18.9%	18.4%	17.9%	17.4%	16.9%	16.4%	16.0%	15.5%	15.1%	14.7%	14.3%	13.9%
Urban poor	20.0%	19.7%	19.4%	19.1%	18.8%	18.5%	18.2%	18.0%	17.7%	17.4%	17.1%	16.9%	16.6%	16.4%
Rural - consolidated	16.0%	15.6%	15.2%	14.8%	14.4%	14.0%	13.6%	13.3%	12.9%	12.6%	12.3%	12.0%	11.6%	11.3%
<b>presumed number out of school</b>														
Rural - dispersed	36,232	36,069	35,907	35,746	35,586	35,426	35,267	35,108	34,950	34,793	34,637	34,481	34,326	34,172
Urban poor	20,040	20,206	20,374	20,544	20,715	20,887	21,061	21,236	21,412	21,590	21,770	21,951	22,133	22,317
Rural - consolidated	879,302	876,835	874,375	871,922	869,475	867,036	864,603	862,177	859,758	857,346	854,941	852,542	850,150	847,765
<b>target number of children served</b>														
Rural - dispersed	21,204	21,997	22,819	23,673	24,558	25,476	26,429	27,417	28,442	29,505	30,609	31,753	32,941	34,172
Urban poor	3,440	3,972	4,587	5,296	6,115	7,062	8,154	9,415	10,872	12,554	14,496	16,738	19,327	22,317
Rural - consolidated	30,829	39,781	51,333	66,238	85,472	110,292	142,318	183,644	236,969	305,780	394,571	509,146	656,990	847,765
<b>implied number of instructors</b> (at existing pupil:instructor ratios)														
Rural - dispersed	392	407	422	438	454	471	489	507	526	545	566	587	609	632
Urban poor	126	145	168	194	224	259	299	345	398	460	531	613	708	817
Rural - consolidated	732	945	1,219	1,573	2,029	2,619	3,379	4,360	5,627	7,260	9,369	12,089	15,599	20,129
<b>implied number of centers</b> (at existing classroom: center ratio)														
Rural - dispersed	196	203	211	219	227	235	244	253	263	273	283	294	304	316
Urban poor	54	62	72	83	96	111	128	148	171	197	228	263	303	350
Rural - consolidated	349	450	581	750	968	1,249	1,611	2,079	2,683	3,462	4,467	5,764	7,437	9,597

## **Components**

### **Teachers**

Most of these programs do not refer to their teachers as “teachers.” Programs prefer the terms “instructors” or “facilitators” as a way of distinguishing them for UPE teachers and to differentiate pedagogy. The term “teachers” has been retrained here only for the purposes of making the report compatible with the Klees et. al. report for UPE schools.

### Salaries and Pupil/Teacher ratios

Teachers (often called instructors or facilitators in these programs) are generally paid US\$ 50,000 per month with no additional benefits. This pay is about half of what regular UPE teachers are currently being paid. The UPE report recommends a substantial increase in UPE teacher salaries with continued increases for the next 13 years. An increase to 70,000 US\$ per month has been suggested for these teachers.

At present, pupil-teacher ratios vary widely between programs with BEUPA at about 27 pupils per teachers and ABEK and MNFE at about 54. On average, the programs have about 44 pupils per teachers. The proposed UPE standard suggests that by 2015, UPE schools have about 40 pupils per teacher on average. Table 5 shows cost estimates if programs were to pay all their instructors US\$ 50,000 per month. The upgraded standard raises this pay scale to US\$ 70,000. UPE teacher costs are taken from the Klees et. al. report. UPE teacher costs are roughly twice that of CBE instructor costs.

**Table 5: Instructor Pay Cost Estimates**

	Description	Annual Cost per student (in 2002 US\$)
<b>LOW COST STANDARD</b>	One teacher for every 45 children; base pay remains at 50,000 per month in real terms	13,333
<b>UPGRADED STANDARD</b>	One teacher for every 45 children; base pay raised to 70,000 per month in real terms	18,667
<b>UPE COSTED STANDARD</b>	One teacher for every 40 children; all teachers paid	30,000

### Training and Certification

CBE programs take on substantial teacher training functions. Most of this training is due to the additional qualifications required of CBE instructors or UPE teachers. Although the typical CBE instructor has a much lower “O” level qualification than do UPE teachers (some have no “O” level qualification while a small minority are actually retired UPE teachers), they must be trained in nonformal education methods, in community development skills and in management skills.

CBE instructors, in general are members of the communities in which they teach. They are expected to be effective in mobilizing the community and in integrating the school into community goals. Further, implicitly, they must meet community standards of teaching and performance. Since the communities monitor their attendance and activities, they are judged not only by routine supervision visits, but also by the community – sometimes on nearly a daily basis.

The training that takes place both initially for new teachers and on an ongoing basis is thus extensive. Table 6 compares these in-service (on-going) costs with the in-service costs estimated in the Klees et. al. report. Not surprisingly, teacher training costs are substantially higher for the CBE programs than for regular schools. (Also see Figure 1, page 22 for a visual comparison of total costs for this training compared across programs and with UPE costs).

**Table 6: Ongoing Teacher Training Cost Estimates**

	Description	Annual Cost per student (in 2002 US\$)
<b>LOW COST STANDARD</b>	maintain existing program of in-service training	416,910 rural cons
		672,238 urban poor
		920,390 rural dispersed
<b>UPGRADED STANDARD</b>	maintain existing program of in-service training	416,910 rural cons
		672,238 urban poor
		920,390 rural dispersed
<b>UPE COSTED STANDARD</b>	Estimated from UPE cost report at US\$ 1,554,286 per teacher	130,040 rural cons
		144,667 urban poor
		124,000 rural dispersed

Several types of issues arise from cost figures concerning teachers. The lower teacher salaries effectively balance off the additional costs of ongoing training. Thus, existing cost structures or even a rise in salaries is within the total teacher costs estimated for UPE schools. Given this, a number of policy directions can be considered that have little or no effect on the sustainability of teacher costs. Table 7 delineates some of the most critical and discusses possible cost implications.

**Table 7: Teacher Salary and Certification Policy Options**

Policy Considerations	Cost Implications
1. Should teacher salaries be maintained at about 50,000 per month?	Salaries could be raised to 70,000 per month and still recurrent costs of programs would stay within projected UPE costs reflected in Klees, et. al. report.
2. Should teachers be put on government payroll and become civil servants? A different category of teachers could be developed for these program teachers with a different pay scale. Since communities currently have considerable say in who gets hired and retained, norms would have to be developed that included ongoing community input and assessment of teachers.	Assuming that such teachers maintain their current status of having no additional benefits and assuming that a new pay scale would reflect either their current salary or the upgraded salary recommended here, this is a no recurrent cost option.
3. Should teachers be certified? Existing procedures and structures required these teachers to have not only academic qualifications, but also community building skills and on-going community support. Any certification would have to take these other factors into consideration.	Many "O" level teachers could be integrated in to the existing distance education programs for regular teachers and obtain regular teacher certification. These costs are included in the UPE cost estimates and, thus, have no additional cost implications.  These teachers, however, meet other standards which will have to be specified – community building

	standards; familiarity with pedagogy which differs from UPE schools and performance evaluations by the community.
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## Texts, Learning Materials and Language

All programs CBE programs use textbooks for teaching. In addition, other learning materials are often used such as posters, drawings and flash cards. In large part, aside from materials used for vocational and trade activities, learning material and text costs will pattern those of regular UPE schools. The costs of such texts/learning materials are estimated at Ush4500 per book. The UPE school estimates are for six books per set, one set

**Table 8: Textbook Cost Estimates**

	Description	Annual Cost per student (in 2002 USh)
<b>LOW COST STANDARD</b>	One set for every three children; estimated per text cost of USh 4500	3400
<b>UPGRADED STANDARD</b>	One set for every child; estimated per text cost of USh 4500	9400
<b>UPE COSTED STANDARD</b>	One set for every child; estimated per text cost of USh 1780	4010

for each of three children and an average use life of three years<sup>3</sup>. This equals USh 3000 per child per year. Instructor manuals add about USh 400-450 per student (depending on pupil/teacher ratio). Table 8 shows these UPE costs<sup>4</sup> and compares them. Although all the programs differ at least somewhat from UPE texts and curriculum (some use UPE texts but do not attempt to cover the entire curriculum; CBE schools also use the older curriculum which has been revised), for purposes of costing, it was assumed that final text and learning material costs would be no greater than that of such materials used in UPE schools. There is no assumption that the context would be the same or that UPE school texts would be used.

Given the assumption of comparability of costs, there are no striking costs issues arising from this estimate. The policy issues, however, are substantial and could potentially raise enormous development costs for such learning materials. Language is a major consideration. At a minimum, were other languages to be used in instructional materials would have to be translated (as they are for ABEEK for example). But few language groups have languages so comparable that a simple translation will suffice. Both language structure and culture vary enough that partially or wholly rewritten materials need to be used.

From a development framework, substantial questions arise. Who would bear the costs of translation and development? Who would make these decisions? If one community bore the costs of a particular language translation, could another community simply "borrow" the

<sup>3</sup> At lower levels, group instructional materials or non-text individual materials are often substituted for texts. Using a similar cost standard for each level allows for instructional materials to be substituted for actual texts with the assumption that costs per student remain about the same.

<sup>4</sup> Text costs used here vary from those reported in the draft Klees et. al. report. During the Klees presentation, Task Force members provided new textbook costs and student:text ratios to be used. Thus, for both the low cost and upgraded standards the new costs/ratios are used.

translation free of costs? Who “owns” the text book rights? For which communities/ languages will separate texts been developed? These questions are being confronted for UPE schools as well as CBE schools. The issues are both politically difficult and complex in terms of costing. If any major changes in language policies were to be adopted for these programs and/or a new set of translations undertaken, a separate cost study would be required. Such a study, however, would not answer all the cost questions unless all parameters (which languages, language compatibility, translation vs. rewrite) had been established before the cost analysis. A cost analysis used to inform such policy could only establish basic cost parameters.

Table 9 raises some of the policy issues arising from taking CBE curriculum to a national scale.

**Table 9: Curriculum, Language and Text Policy Options**

Policy considerations	Cost implications
1. Should basic curriculum be the same for all programs? Should it be aligned with existing UPE curriculum? Should it contain all or part of the UPE curriculum?	Programs vary somewhat as to existing curriculum. Following UPE curriculum saves both recurrent and development costs associated with developing and maintaining separate texts. Since, the recurrent costs of such maintenance are already reflected in program budgets, differences could be maintained without additional recurrent costs.
2. Should curriculum be presented in local languages? For all populations/communities /programs? If so, at all levels? For all grades? Who will bear the costs of translation? Are all texts easily translated between languages/cultures?	Local language curriculum is a <u>major</u> cost concern. Delivering curriculum in local languages is very expensive. Some language texts can be shared across districts – others would be targeted at very small populations. Some texts can simply be translated, others need to be rewritten. If language policy changes are considered, a special study must be undertaken to look at cost implications.
3. Who will decide the language and curriculum issues? How will communities be involved? Will decisions be made on a regional, district or national level? How will costs be divided or shared?	Local language delivery will be more expensive on a per/student cost basis for smaller language groups. Further, training costs for teachers and supervisors need to be considered. If costs are not linked to decisions (i.e. those who decide need also be responsible for finding the funds), then costs can be prohibitive. Revision and in-service training will add to continuing costs of local language curriculum.

## Community Development

There is strong anecdotal evidence that many or all of the CBE programs serve a community development function. The evidence is strong because it is triangulated.<sup>5</sup> First, program evaluations, both formal and informal (see list of references for a number of CBE program evaluations) cite community development<sup>6</sup> as a goal, an outcome or a process explicitly targeted by various CBE programs. Second, multiple documented and verbal reports<sup>7</sup> have listed a number of changes occurring in communities as a result of program participation and exposure. Third, this author spoke with community members who were able to list, with seemingly little hesitation, changes they had observed in their communities since a CBE program was introduced. Informally, many of the CBE program administrators cite community changes as one of the most profound changes resulting from CBE program presence in the community.

Assessing how and why this community development takes place is beyond the scope of this report. Nevertheless, it is worth noting here that such a full cost analysis of the programs would include this outcome as one of the benefits resulting from expenditures in CBE programs<sup>8</sup>. Whether expenditures are specifically targeted at changes within the community or are designed to enhance the quality of the CBE program for participant students, this analysis found expenditures that fit into a category that has been called "community development" for purposes of this report. Most of these expenditures were for meetings with community members (or among different communities) or were to support community management committee work. In some programs, such expenditures were wrapped in to larger budget items and hard to disentangle. Also, the amount of community involvement varies considerably among programs. COPE, for example, appeared to involve the community the least. ABEK put the most emphasis on community development outcomes<sup>9</sup>.

Table 10 shows rough estimates of expenditures targeted at community development. Because the three programs in rural consolidated communities had such diverse budget categories and labels and appeared, at least in terms of expenditures, to have such diversity of expenditures in community development, this analysis used the figure from BEUPA (urban poor) as a rough estimate of community development expenditures across the three rural consolidated programs. Given the large difference between ABEK community development expenditures and those reported by rural consolidated programs, it is likely that the rural consolidated expenditures in this category has been underestimated. Nevertheless, it is also likely that ABEK spends more on community development than other programs given the dispersed communities in which they work and the travel costs of district and national participants in community development workshops and meetings.

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<sup>5</sup> Triangulated refers here to a criteria often used to assess the validity of qualitative data. The term derives from a standard that qualitative data can be validated if evidenced from more than one source – often three sources are sought – hence, "triangulation."

<sup>6</sup> The term "community development" used loosely here and often referred to as community involvement, community management or community participation.

<sup>7</sup> See, for example, some of the evaluation reports of CBE programs cited in the reference list in this report, minutes of the Task Force for UPE on 16 August 2001, and handout provided by Dr. Kyekune at the same meeting.

<sup>8</sup> Informally, this author met with a number of program administrators and suggested means by which such impacts could be systematically documented and a valid instrument could be developed. There seemed to be general agreement that such an instrument was needed and should be formally developed.

<sup>9</sup> This consultant was unable to visit ABEK sites and assess community participation first-hand. Among those CBE program sites visited, initial visits did not allow for a fuller assessment of these community impacts. Thus, the wording here is tentative.

**Table 10: Ongoing Community Development Cost Estimates**

	Description	Annual Cost per center (in 2002 US\$)
<b>LOW COST STANDARD</b>	maintain existing program of community development	110,873 rural cons
		110,873 urban poor
		341,082 rural dispersed
<b>UPGRADED STANDARD</b>	maintain existing program of community development	110,873 rural cons
		110,873 urban poor
		341,082 rural dispersed
<b>UPE COSTED STANDARD</b>	None estimated for UPE schools	0

## Administration

### Supervision and Monitoring

This expenditure category posed the largest challenge for costing. Programs were highly diverse in how centers were monitored and how such costs were accounted for. Some programs provided a small allowance for district personnel or monitor programs. Others provided no additional allowance and considered monitoring as part of the district personnel's regular activities. Others did not use district personnel for monitoring and evaluation. As the focus of this report was to estimate the costs of expanding such programs under official MOES sanction, costs in this category were estimated using several approaches.

First, both ABEK and BEUPA had specific expenditures that were easily identified and labeled as supervision and monitoring costs. There was reasonably good evidence that these reported expenditures reflect all or nearly all of the cost associated with supervision and monitoring of these programs. This evidence was based upon interviews with program administrators and project accountants. The rural consolidated programs, however, had not only highly differential means of accounting for such costs, it was clear that all reported costs were undercounts of the true cost of the supervision and monitoring function. In this instance, costs were estimated using an input method of estimation. In this instance, a typical salary of a district supervisor was used to estimate the value of his/her time spent on a typical monitoring visit. Reportedly, supervisors do not visit centers as often as is planned because of travel, transportation and time constraints. So, as an estimate of what costs might be faced were such programs to be nationally sanctioned (and, likely, similarly supervised and monitored), a conservative estimate of three visits per years established the "low cost standard"<sup>10</sup>. The upgraded standard used the very same input costs but doubled the number of visits to six per year.

Little information was available on what supervision and monitoring expenditures were for existing UPE schools. Thus, a similar method was used as a *very rough estimate* of existing UPE expenditures on such activities. These UPE estimates, however, added an additional element to the estimated costs – it included two visits per year of national-level supervisors. Since these UPE costs were based only upon rough assumptions of probable supervision activities (but actual salary rates and travel costs), the UPE cost estimates could be off by a

<sup>10</sup> All program administrators would have agreed that three visits per year is not enough, but of the programs that depended upon district personnel to supervise, a reasonable estimate of current supervision visits was three times per year.

significant factor<sup>11</sup>. Nevertheless, this estimation serves as a rough guide of cost comparisons between existing UPE expenditures and those borne by CBE programs<sup>12</sup>.

Table 11 shows the cost estimates using this rather complex costing framework. Once again, ABEK costs (rural dispersed) were much higher than other programs due to the distances involved and the nature of the populations and centers that needed outside input and monitoring.

**Table 11: Supervision and Monitoring Cost Estimates**

	Description	Annual Cost per center (in 2002 USh)
<b>LOW COST STANDARD</b>	estimated existing amount; 3 supervisor visits per center per year; 1 center per day	31,246 rural cons
		35,746 urban poor
		163,337 rural dispersed
<b>UPGRADED STANDARD</b>	double existing amount supervisor visits per center per year; 1 center per day; keep existing standards for ABEK	62,492 rural cons
		62,492 urban poor
		163,337 rural dispersed
<b>UPE COSTED STANDARD</b>	upgraded standard plus two national monitoring visits per year	110,492

Not included in these supervision expenditure estimates is the value of community supervision for these centers. In nearly all programs, communities play a significant role in monitoring their centers. Anecdotal reports indicate that parents are often (sometime always) present during instruction. As instructors are community residents and often approved by the community, the community often takes on the responsibility to see that instructors are present, on task and handling students according to community standards of behavior. This is a role generally not done by communities in UPE schools. Thus, it is likely that communities contribute in significant ways to the quality and quantity of instruction at their centers. The market value of such community participation is difficult to assess since it can be viewed in many ways. Presumably, it adds to the quality of outcomes. It adds community and national benefits by tying the community in to the network of centers and UPE efforts. It is also an opportunity costs to parents. Although such opportunity costs are also hard to assess, an estimate is that the value of a day's labor for the poorest 20 percent of the population is about USh 1000<sup>13</sup>.

### Management

These CBE programs have large management costs and, once again, the challenge was to use existing expenditures to estimate costs of the programs were they to be nationally sanctioned and, likely to have similar outcomes standards of management. Clearly, the costs of foreign managers would unlikely to replicated on a national scale were programs to

<sup>11</sup> The likely variance factor here is largely the frequency of such visits. UPE estimates were six visits by district supervisors per year and two visits by national supervisors per year.

<sup>12</sup> It should be noted that this input estimate method also allows for an implicit expansion of supervision personnel (likely at the district level) as these programs expand. That is, since the basis of the cost estimate is supervisor's monitoring costs (based upon their salary rate), implicitly, additional supervisors would be added as additional centers are added that require monitoring.

<sup>13</sup> Lowest quintile of Uganda's population



become part of regular MOES activities<sup>14</sup>. Other than this caveat, expenditures reported here reflect actual expenditures of programs as they now exist. The implicit assumption here is that management activities are currently at least adequate (possibly optimal) and ought to be continued at existing levels – prorated across centers<sup>15</sup>. Table 12 shows these cost estimates. Thus the upgraded standard is the same as the low-cost standard – both reflecting existing expenditures levels.

Also reflected in Table 12 are estimated costs of existing UPE school management. A cursory examination of the MOES budget rendered an estimate of 15 percent management costs. That is, of the total MOES budget, about 15 percent appeared to be central management costs<sup>16</sup>. This is a very rough estimate based on a largely cursory examination of the existing MOES budget, but, once again, serves as a basis for comparing CBE costs with those faced by regular UPE schools.

**Table 12: Management Cost Estimates**

	Description	Annual Cost per center (in 2002 US\$)
<b>LOW COST STANDARD</b>	Maintain existing management structure and cost ratios	448,398 rural cons
		831,960 urban poor
		353,715 rural dispersed
<b>UPGRADED STANDARD</b>	Maintain existing management structures and costs ratios	448,398 rural cons
		831,960 urban poor
		353,715 rural dispersed
<b>UPE COSTED STANDARD</b>	Estimated UPE per pupil management costs prorated for complementary program student and classroom ratios	633,198

Under an MOES sanctioned expansion of these programs it is likely that management structures would change considerably. Informal discussions with program managers indicated their desire to discuss shared or combined management approaches were programs to be expanded nationally and sanctioned officially by the government. Table 13 introduces some of the policy considerations that would drive expansion costs for management. Likely, any alternative management structure would reflect scale economies.<sup>17</sup> Thus, it is likely that any alternative management structure would be no more expensive (on a per-center basis) than those reflected in existing expenditure levels.

<sup>14</sup> But, in large part, foreign salaries were not included in budgets and, where they were, they were wholly or largely excluded from cost projection estimates reported here.

<sup>15</sup> In fact, there is a small costing problem here causing a likely overestimate of the cost of management in an expanded program structure. A large share of management costs is “fixed”. That is, they are invariant relative to program size. Most programs, for example, have only one national coordinator, one national accountant – regardless of size. Thus, a more precise estimate would have involved separating fixed and marginal (per-student or per-center) costs for management and treating these differently for purposes of estimating expansion costs. The highly differential and diffuse budgets for these programs would not have justified such finely-estimated divisions. Thus, average cost-per-center was used as a standard.

<sup>16</sup> But, such estimates were very rough. A more accurate estimate would have come from a more detailed examination of the budget in collaboration with an MOES budget officer. The budget used also included district level management costs which were not included in this 15 percent estimate, and, perhaps ought to have been included if UPE school management procedures and costs were more clearly understood.

<sup>17</sup> Scale economies refer to a reduced cost per unit (less cost per student or center, for example) as programs expand. This is because some management, accounting, travel and supervision activities could be combined across programs.

**Table 13: Management and Structure Policy Options**

Policy considerations	Cost implications
1. How should existing programs be structured? Should all five programs continue to look about the same as they do now? Can rural programs for consolidated communities be combined?	The three programs for rural consolidated communities cost about the same for various components. They could retain their current distinctions or be combined with little recurrent cost effect.
2. How can programs be expanded for these populations? Programs for rural consolidated children would have to grow at 30 percent per year in order to accommodate these children. Who will plan for this expansion? Should programs combine planning, budgeting and management personnel for executing this expansion? What personnel, office and procurement needs will have to be met?	The planning and execution of expansion will take a large management team. The cost estimates in this report account for existing expansion costs. But, expanding on this scale may require another layer of management for the duration. This may require more than the normal management allotment foreseen by these figures.
3. What role will be played by the districts? Will they be trained and charged with supervision? With planning? Will they have a say in the structure and size of the programs?	Existing CBE programs are not beneficiaries of the Capitation grant. This grant may be used to supplement some of the learning materials and transportation costs or to supplement district participation in the school. At present, some programs involve districts in supervision and, thus, such costs are incorporated here. Should districts take on a substantially different role or funding structure vis-à-vis these programs, a small study estimating costs and comparing them with both MOES management costs and management/supervision costs for these existing programs would need to be done to see whether costs increase/decrease and/or need to be shifted from one entity to another (i.e. program management to districts).
4. What role will the MOES play? Will it serve as the central administration? Coordinator? Clearing house? Will it have a say over who gets hired, over central operations such as supervision?	Management costs for both MOES UPE schools and these programs are included in these costs estimates. Assuming that such management is relatively similar between the MOES and existing program management, such costs have been accounted for here.

### *Evaluation EMIS and Central Management*

The costs of evaluation, EMIS and central management are included in central management costs for existing UPE schools. CBE programs undertake diverse, sometimes informal and often sparse evaluation and EMIS activities on a basis comparable to that used for UPE schools. Thus, no cost expenditures were estimated separately here. Such functions deserve special mention, however, in that they likely would be added to CBE programs were they to be expanded nationally and integrated in to MOES policies. Since cost estimations are included in management (above), the main concern would be policy changes.

It is possible that some formal, systematic means of program evaluation will be integrated into a CBE program expansion. Policy concerns for outcome measures are discussed separately in this report in the section entitled "Efficiency/Effectiveness," (page 30).

It is likely that such programs could (or should) also be included in EMIS activities of the MOES. Since EMIS costs are included in central management MOES cost estimates, the cost of including such programs is already included in these estimates. The decision on whether to include CBE programs in EMIS activities, however, is a policy decision that needs explicit consideration by policy makers.

### Classrooms and Land

The existing costs of classrooms vary widely among CBE programs. Some programs require communities to bear the full cost of construction. Other programs provide modest support to supplement community construction efforts. Other programs bear nearly the entire cost of construction of centers. For purposes of estimating costs for expansion, however, existing costs were not used. Rather, estimated costs of a *common standard* were used. This assumes that, in a nationally sanctioned and expanded CBE scenario, all programs would face similar (or identical) construction costs and, likewise, all communities would have about the same level of construction support.

A particular challenge here was estimating the cost of land. Some programs informally suggested that land would continue to be freely available (ABEK) while other programs indicated that land was a growing constraint for program expansion (BEUPA). Thus, the cost of land was included in the upgraded construction estimates here. To the extent that land is not purchased, the upgraded standard cost estimates will be an overestimate<sup>18</sup>.

Table 14 shows estimated land and construction costs. The "low standard" uses US\$ 4 million as the per-classroom cost of construction.<sup>19</sup> A reasonable CBE expenditure estimate per classroom of existing expenditures by programs (excluding community costs) is about US\$ 2 million at present. Programs were in agreement that this amount was too small and generally felt that US\$ 4 million was a reasonable estimate for a low-cost standard. The upgraded standard used this base construction support amount and added the cost of a water tank, furniture and land.

**Table 14: Construction and Land Cost Estimates**

	Description	Annual Cost per center (in 2002 US\$)
<b>LOW COST STANDARD</b>	Programs currently provide nothing, 2 M or 4M	8,389,685 rural cons
		9,333,333 urban poor
		8,000,000 rural dispersed
<b>UPGRADED STANDARD</b>	Base amount of 4 million US\$ with additional funds for furniture, water tank and land. Rural land = 2.2 M US\$; Urban land = 6.4 M US\$	13,860,711 rural cons
		15,419,725 urban poor
		13,216,907 rural dispersed
<b>UPE COSTED STANDARD</b>	Existing UPE budgeted costs	17,828,080 rural cons
		19,833,333 urban poor
		17,000,000 rural dispersed

<sup>18</sup> Different land costs were used for urban vs. rural areas here. In urban areas, land comprised nearly 60 percent of total construction cost estimates while in rural areas, the percentage of costs estimated for land were about 35 percent of total costs.

<sup>19</sup> Including latrines.

The existing UPE construction costs used here derived from the Klees et. al. report that estimated US\$ 8.5 million for each classroom for formal UPE schools. This base costs was pro-rated for CBE pupil-teacher ratios and center size.<sup>20</sup>

## Initial and startup-costs

All programs had considerable start-up costs. These costs typically included community sensitization, community, instructor and supervisor training and some capital costs.<sup>21</sup> An assumption was made that programs were currently spending adequate (perhaps optimal) amounts on start-up activities and capital investments and, therefore, continue to face similar costs in any nationally expanded scenario<sup>22</sup>. Estimates for start-up UPE schools (aside from capital investments) were gauged at zero<sup>23</sup>. Table 15 shows cost-up cost estimates for these programs estimated at current rates of activities.

**Table 15: Initial and Start-up Cost Estimates (exclusive of training)**

	Description	Annual Cost per center (in 2002 US\$)
<b>LOW COST STANDARD</b>	Maintain existing levels of community, training and administrative start-up costs	2,500,000 rural cons
		1,899,500 urban poor
		1,347,837 rural dispersed
<b>UPGRADED STANDARD</b>	Maintain existing levels of community, training and administrative start-up costs	2,500,000 rural cons
		1,899,500 urban poor
		1,347,837 rural dispersed
<b>UPE COSTED STANDARD</b>	None estimated for UPE schools	None estimated for UPE schools

For costing purposes, initial teacher and supervisor training was separated from other initial and start-up costs. This was purely a matter of expediency. Since initial training was a large factor in start-up costs, this analysis separates such costs as possible assistance in guiding policy development. Table 16 shows these initial training costs.

<sup>20</sup> Across CBE centers, the average number of classrooms per center was 2.3.

<sup>21</sup> But programs did vary. COPE had fewer start-ups costs because it had fewer community activities whereas ABEK had bona fide vehicle costs for groups of centers given their dispersal over large land areas.

<sup>22</sup> Once again, it was difficult to separate some of these costs out from other activities. It is likely, for example, that in ABEK's extensive set of community, district and national consultative meetings, start-up, evaluation and community development functions all take place. Estimates here, as with most other components, are best guesses given existing accounting practices.

<sup>23</sup> One could argue that teacher training costs for UPE formal schools belong here. But cost analysis convention usually includes them in teacher costs as was done in the Klees et. al. report.

**Table 16: Initial Training Cost Estimates**

	Description	Annual Cost per center (in 2002 USh)
<b>LOW COST STANDARD</b>	maintain existing program of in-service training	2,500,000 rural cons 2783,333 urban poor 3,666,291 rural dispersed
<b>UPGRADED STANDARD</b>	maintain existing program of in-service training	2,500,000 rural cons 2783,333 urban poor 3,666,291 rural dispersed
<b>UPE COSTED STANDARD</b>	Estimated from UPE cost report at USh 6,200 annually per teacher	3,259,992 rural cons 3,626,667 urban poor 3,108,571 rural dispersed

### ***Cost Projections***

The cost of component parts of CBE programs were used to project costs forward given assumed student population numbers. Costs were projected in three ways: across programs, across cost packages and across expenditures. Overall, unit CBE program expansion costs allied with UPE expansion costs on a per-student and per-center costs basis. While individual components varied widely both among CBE programs and between CBE programs and UPE formal schools costs, the unit costs were largely the same (as demonstrated in the section on Budgetary Impact, page 24).

### **Comparisons Across Programs**

Table 17 repeats costs reported above in the "components" section but does so in one unified table as a means of comparing costs across programs and across components.

**Table 17: Comparisons of Costs Across Programs and Components**

	rural consolidated communities			urban poor communities			rural dispersed communities		
	Low cost option	Upgraded standard	UPE standard	Low cost option	Upgraded standard	UPE standard	Low cost option	Upgraded standard	UPE standard
<b>Recurrent calculated per student</b>									
Texts and learning materials	3,400	9,400	4,010	3,400	9,400	4,010	3,400	9,400	4,010
instructor salaries	13,333	18,667	30,000	13,333	18,667	30,000	13,333	18,667	30,000
<i>subtotal - p/stud recurrent</i>	<i>16,733</i>	<i>28,067</i>	<i>34,010</i>	<i>16,733</i>	<i>28,067</i>	<i>34,010</i>	<i>16,733</i>	<i>28,067</i>	<i>34,010</i>
<b>Recurrent calculated per center</b>									
Supervision and monitoring	31,246	62,492	110,492	35,746	62,492	110,492	163,337	163,337	110,492
On-going community dev't	110,873	110,873	0	110,873	110,873	0	341,082	341,082	0
On-going Teacher Training	416,910	416,910	130,040	672,238	672,238	144,667	920,390	920,390	124,000
Other management	448,398	448,398	633,198	831,960	831,960	633,198	353,715	353,715	633,198
<i>subtotal - p/center recurrent</i>	<i>1,007,427</i>	<i>1,038,673</i>	<i>873,731</i>	<i>1,650,817</i>	<i>1,677,564</i>	<i>888,357</i>	<i>1,778,524</i>	<i>1,778,524</i>	<i>867,691</i>
<b>Development calculated by center</b>									
Construction, land & furniture	8,389,685	13,860,711	17,828,080	9,333,333	15,419,725	19,833,333	8,000,000	13,216,907	17,000,000
start-up; needs assessment	2,500,000	2,500,000	0	1,899,500	1,899,500	0	1,347,837	1,347,837	0
Initial training	2,500,000	2,500,000	3,259,992	2,783,333	2,783,333	3,626,667	3,666,291	3,666,291	3,108,571
<i>subtotal - p/center development</i>	<i>13,389,685</i>	<i>18,860,711</i>	<i>21,088,072</i>	<i>14,016,167</i>	<i>20,102,558</i>	<i>23,460,000</i>	<i>13,014,128</i>	<i>18,231,035</i>	<i>20,108,571</i>

## Comparisons of Cost Packages

Figures 1, 2 and 3 show the same costs as reported in Table 17 but in a visual form that comparisons across program packages and shows CBE program costs relative to UPE costs. On each of these three figures, the “100%” horizontal line represents the estimated unit costs of UPE schools. Thus, a bar that falls below the “100%” line shows a cost component that is less than that estimated for UPE schools, while a bar that extends above the “100%” mark shows CBE components costs that exceed UPE formal school cost estimates. Although some costs far exceed those for estimated for UPE schools, the most expensive components – teacher salaries and construction costs, are cheaper for CBE programs than for UPE schools.

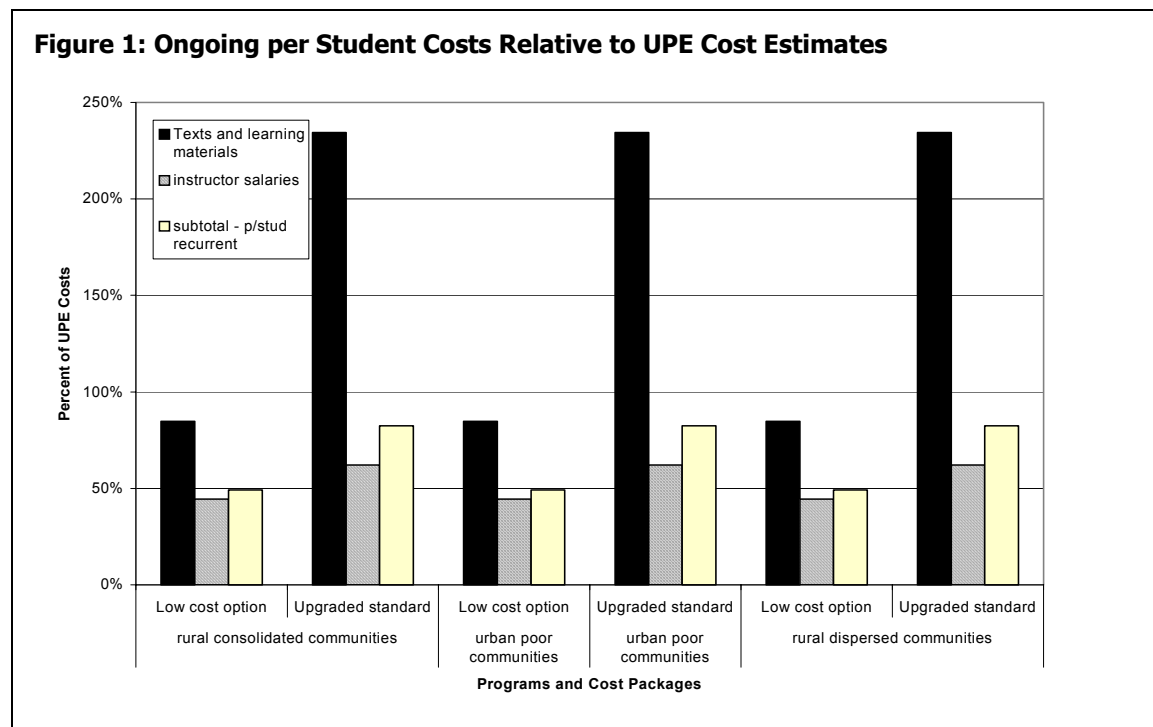


Figure 1 shows that texts and learning materials are estimated to be higher than estimated UPE formal schools costs reported in the draft Klees et. al. report<sup>24</sup>. Instructor salaries fall far below similar salaries for UPE formal school teachers. Because texts and learning materials represent a relatively small share of ongoing costs per student (and instructor salaries a relatively large share), the unit (subtotal p/student recurrent) costs are less than those estimates for UPE formal schools for the same components.

<sup>24</sup> But, as stated earlier, these UPE text costs are likely to be revised in the final Klees et. al. report.

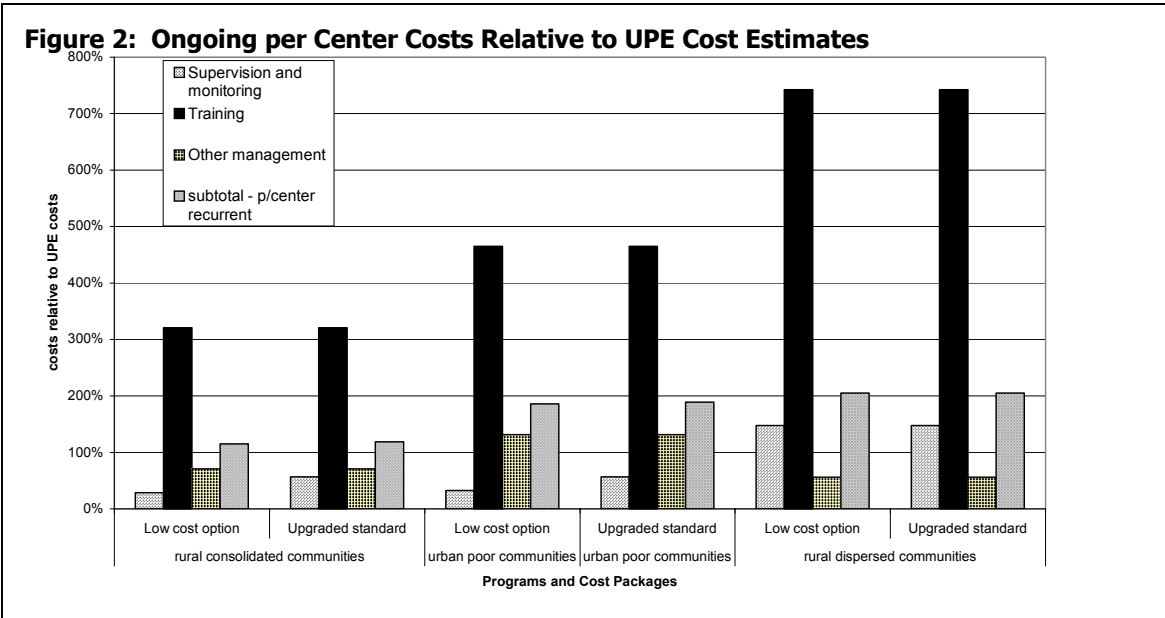


Figure 2 shows that training costs can be up to seven and half times higher than UPE training costs for some CBE programs (notably ABEK). Although high, these training costs comprise a relatively small share of CBE center costs and, thus, subtotals for this category are largely in line with overall UPE formal school costs in this category.

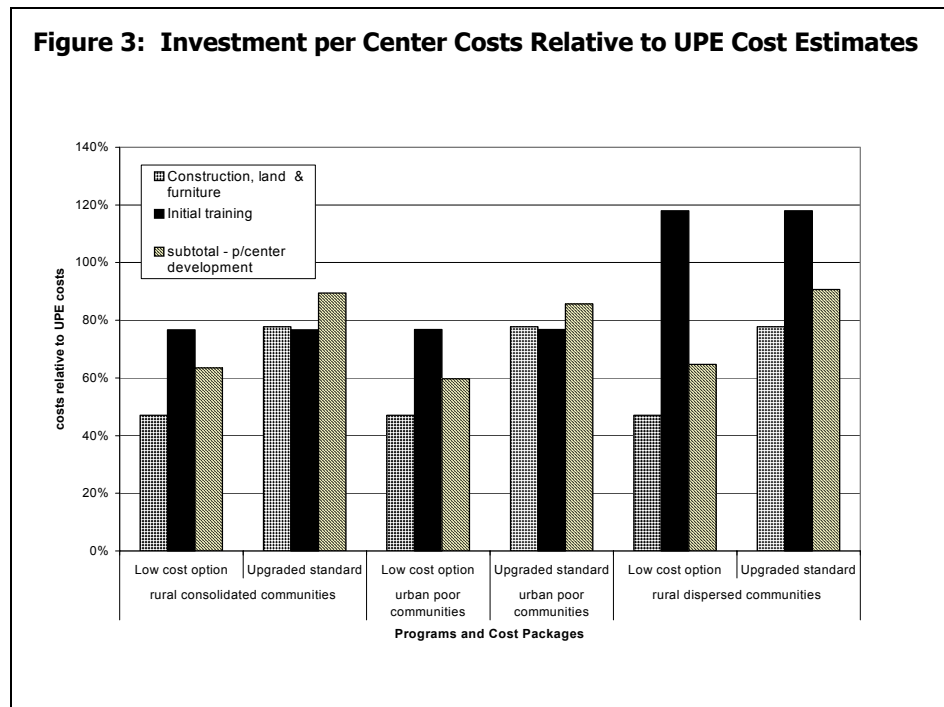




Figure 3 compares investment costs per center to those of formal UPE schools. Initial training is more expensive in ABEK centers than it is for UPE schools by a small factor (about 20 percent more expensive). All other per-center investment costs fall below those estimated for the same components in UPE formal schools.

### **Budgetary Impact**

Table 18 takes these components cost and multiplies them by the student and center estimates (discussed in section "Demand projections," page 6). Per-student and per-center ongoing costs were combined for a total on-going cost estimate. Budget convention usually puts most ongoing costs in recurrent budgets and usually puts investment costs in development budgets. This has not been the case for CBE-related expenditures currently budgeted for the MOES, so this report does not replace ongoing and investment labels with budget category labels.

As the table clearly shows, overall UPE cost estimates are about the same as those estimated for CBE upgraded standards. The differences between UPE cost estimates and the upgraded standards are probably not significant because the errors in estimates may be larger than the overall cost differences.

Figure 4 charts ongoing costs for the three cost packages. Upgraded standard cost projections run about ten percent higher than the estimates for UPE formal schools – likely within the range of estimate errors so the differences ought to be considered not significant.

Figure 5 compares the cost packages for investment costs. UPE cost projections and the upgraded standard cost estimates are virtually identical while the low-standard (existing programs estimated at expansion cost rates) are considerably lower.

Figure 6 does the same thing for total costs and, once again, shows that total UPE unit expansion costs (on a per-student and per-center basis) run about the same as CBE unit expansion costs.

Although overall cost projections demonstrate that CBE unit costs are about the same as UPE unit costs, the relative component parts have very different costs. Sending students to CBE programs is no more expensive than sending them to UPE schools. Nevertheless, were program policies, procedures or management to change, affecting components costs, overall costs could change relative to UPE formal school costs. The assumptions imbedded here estimated using slightly high cost assumptions, so there is some tolerance for modest policy changes that might increase unit CBE costs.

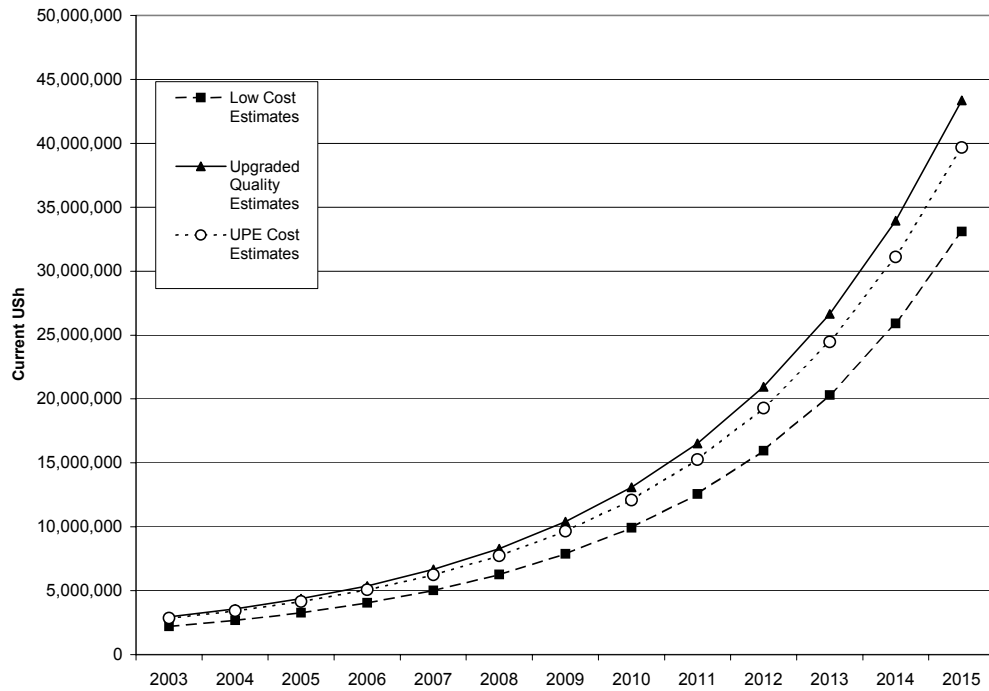
**Table 18: Cost Projections by Budget Types**

(in thousands of 2002 US\$)

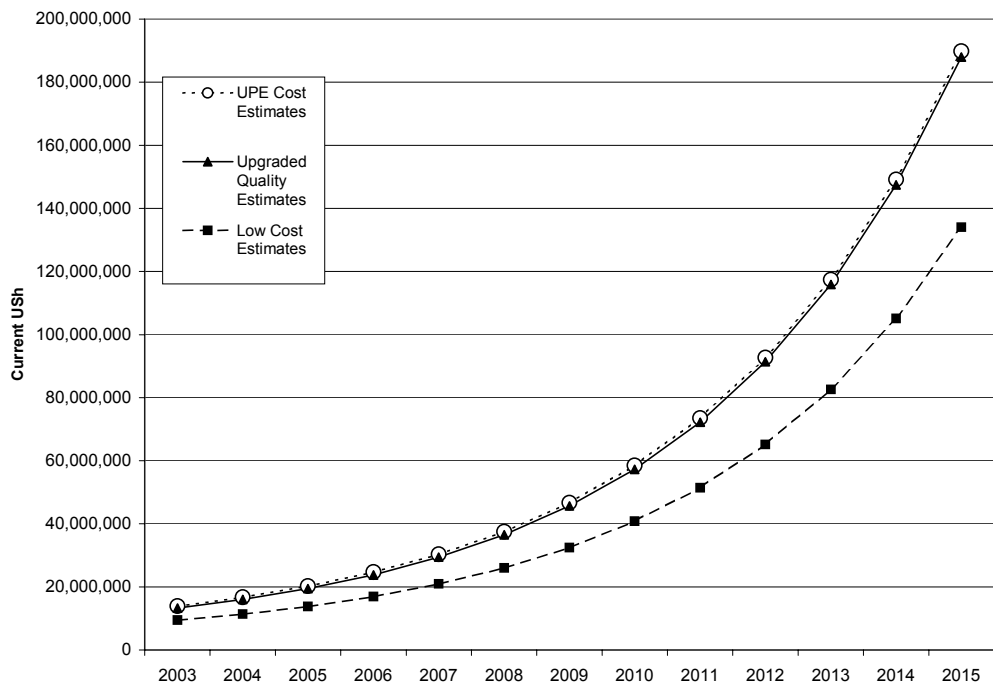
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2015
<b>Ongoing costs</b>										
Low Cost Estimates	2,208,934	2,682,433	3,284,450	4,051,551	5,030,827	6,282,937	7,886,034	9,940,823	12,577,092	33,096,458
Upgraded Quality Estima	2,962,122	3,583,319	4,372,524	5,377,528	6,659,880	8,298,864	10,396,630	13,084,812	16,533,060	43,363,912
UPE Cost Estimates	2,859,963	3,430,380	4,153,677	5,073,301	6,245,208	7,741,478	9,654,979	12,105,388	15,246,948	39,668,228
<b>Investment Costs</b>										
Low Cost Estimates	9,457,270	11,396,110	13,853,847	16,977,356	20,955,687	26,032,239	32,520,467	40,824,129	51,463,403	134,037,965
Upgraded Quality Estima	13,298,585	16,019,938	19,468,923	23,851,402	29,432,331	36,552,829	45,652,169	57,296,155	72,213,710	187,965,683
UPE Cost Estimates	13,960,821	16,731,494	20,235,442	24,679,325	30,329,021	37,526,704	46,712,871	58,454,728	73,482,818	189,845,460
<b>Totals</b>										
Low Cost Estimates	11,666,204	14,078,543	17,138,297	21,028,907	25,986,513	32,315,176	40,406,501	50,764,951	64,040,495	167,134,424
Upgraded Quality Estima	16,260,708	19,603,258	23,841,448	29,228,930	36,092,211	44,851,693	56,048,799	70,380,967	88,746,769	231,329,596
UPE Cost Estimates	16,820,784	20,161,873	24,389,118	29,752,626	36,574,229	45,268,182	56,367,850	70,560,116	88,729,765	229,513,688

Note: Ongoing costs are generally budgeted in the recurrent budget; Investment costs are generally budgeted in the development budget

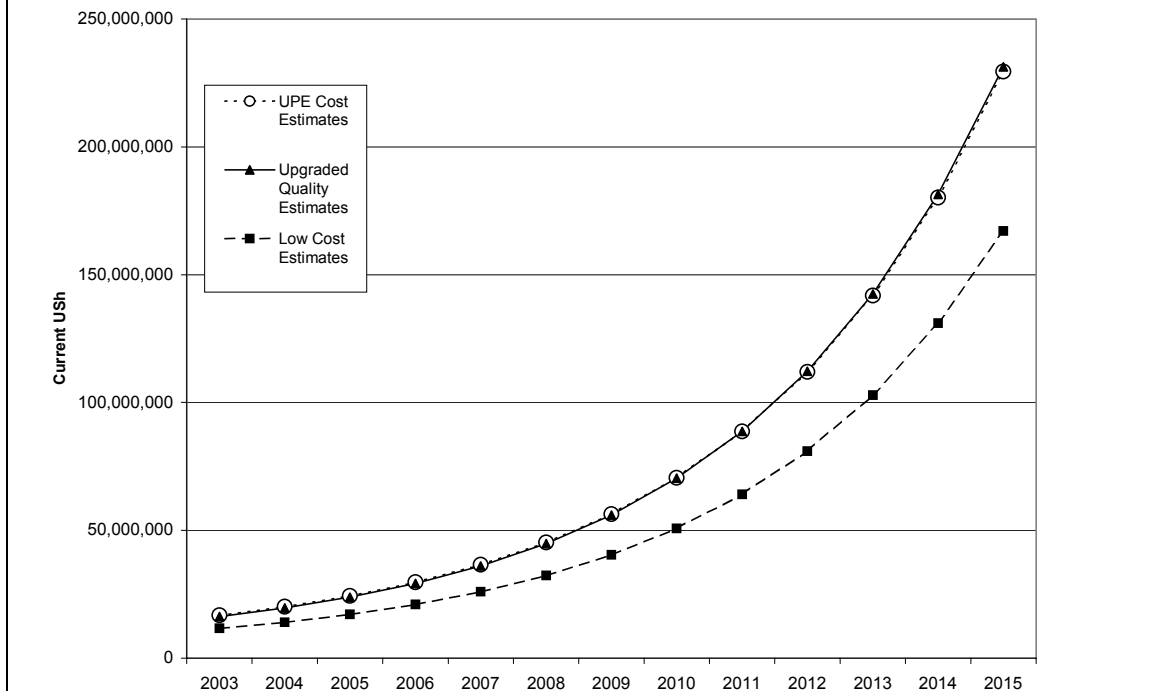
**Figure 4: Ongoing (recurrent) Cost Projections**



**Figure 5: Investment (development) Costs**



**Figure 6: Total Costs**



### ***Program Impacts***

Most of the costs reported above refer to costs that are likely to be faced by an agency (perhaps the MOES) that administers the CBE program in an expanded form. As such, they refer to institutional costs that are, in one form or another, budgeted. Presumably, these costs are borne in exchange for benefits – accruing national, regionally, for the community or privately.

This section of the report deals with impacts beyond those that are budgeted cost to program administrative agencies. Three such impacts were briefly mentioned above. The first was a community development impact. The second was the value of supervisory input by parents and community in a CBE school. The third was the value of land, labor and construction materials sometimes provided by communities. Each of these costs and benefits are program-specific at present and may or may not (depending upon policy decisions) continue in an expanded CBE scenario.

Two other program impacts, however, deserve some attention. There are clearly private costs borne by parents who send their children to school. Further, there are academic and non-academic impacts for the students who attend these CBE schools.

### **Private Costs**

Parents face direct costs of sending their children to school – whether CBE centers or UPE formal schools. CBE programs clearly try to minimize these private costs. Some programs (ABEK) actually provide for the student consumable learning materials such as exercise

books and pencils. Others expect that children will be provided these materials from other sources. None of the programs require school uniforms. Table 19 estimates these private costs in three situations. The first column labeled “minimal,” shows the estimated minimum levels of private inputs needed to participate in UPE schools. In this case the average used was, 4 ½ exercise books per year, 1 ½ pencils per year. The second column estimates the average “typical” usage. “Typical,” in this instance means a set of learning materials that is adequate, but not at all excessive for learning CBE subject materials. In this case, 12 exercise books per year and 2 pencils. The third column attempts to estimate average costs borne by UPE students. This is a bit more complex. An estimated 21 exercise books (one per subject – a new exercise book each quarter) and 3 pencils were included in this package<sup>25</sup>. One uniform per child per year<sup>26</sup> is assumed. Some children are transported by private vehicles – bicycles, motorbikes, cars or buses. Even assuming that this is a relatively small portion of the UPE school attendees and that even those that are transported do not attend each day and/or do not take transportation each day, transport costs still add significantly to estimated UPE formal school private costs (about 20 percent of total costs).

	CBE programs		UPE
	minimal	typical	schools
exercise books	540	1,440	2,520
pencils/pen	150	200	300
transportation	-	-	6,048
uniform	-	-	18,000
total avg. cost	690	1,640	26,868

This research encountered a frequently expressed desire by CBE students to be provided school uniforms. CBE administrators also reported that this was a constantly expressed desire by these students. BEUPA center children are often attending classes in the same location or very near by a formal UPE school and, likely, the most obvious symbol of their differential status was the absence of school uniforms. Yet, as Table 19 reveals, an estimated 67 percent of private costs of school are attributable to the cost of school uniform purchase. Given this, it would be hard to justify adding uniforms to the private costs of CBE programs.

## Opportunity Costs

Opportunity costs for CBE populations are high – a large factor in children’s inability to attend regular UPE schools. These costs are particularly high for girls. Table 20 displays reasons given by households for school-aged children not attending school.

<sup>25</sup> In keeping with the standards used in the rest of this report, UPE standards were estimated at levels that are substantially adequate for the curriculum. The implicit assumption is that there are resources to provide these levels.

<sup>26</sup> Uniform costs vary widely but average around US\$ 18,000. The costs assume that a child has one new uniform per year and that that uniform lasts only one full school year.

**Table 20: Indicators of Opportunity Costs of Attending School**

(from DHS Household Survey, 2001; education data set)

	rural		urban		national avg.
	female	male	female	male	
work in family business	30.19%	53.85%	43.75%	n/a	39.18%
needed for domestic work	96.15%	61.54%	100.00%	n/a	87.50%
take on employment elsewhere	1.89%	3.85%	18.75%	n/a	5.15%

note: of 97 children who were not attending school, only 2 were urban males. Their responses are not included here because their sample size is too small to be reliable.

The household survey from which this data is drawn (Uganda Bureau of Statistics, 2001b) asked households to identify any reasons why children in the household were not attending school at present. Table 20 lists just three of the reasons identified by households. Each of these three reasons is an indicator of opportunity costs. Note that female opportunity costs appear to be larger than that for males. Virtually every female child not in school had domestic responsibilities that impeded school attendance. Further, a substantially larger portion of females took on outside employment than males. Judging from the numbers, only rural males (not urban) seem to face opportunity cost constraints to formal schooling (see Table 20 note). This percentage was high – about 54 percent. Overall, opportunity costs appear to be very high for this out-of-school population.

Of course, costs are always seen in the light of benefits. Opportunity costs become a constraint only when families and children see such costs as being larger than the perceived benefits. Table 21 shows responses to the same question as referenced in Table 20, but captures responses that indicate perceived value of school. In reading this table, it is important to remember that household respondents chose from a list of possible reasons for household children not attending school. Thus, a failure to indicate a given reasons may mean that other reasons predominated.

**Table 21: Indicators of Benefits of Attending School**

(from DHS Household Survey, 2001; education data set)

	rural		urban		national avg.
	female	male	female	male	
school is not important	4.81%	2.91%	0.00%	5.56%	3.69%
student has no interest in school	14.44%	12.79%	0.00%	22.22%	13.02%
school does not lead to jobs	0.00%	0.58%	0.00%	0.00%	0.25%

Again, males and females differed here. Males who selected any of these responses, tended to have lost interest in schooling. This was a predominant reason (among these three reasons) for females to have left school as well. The fact that schooling may not lead to jobs was not a reason to leave (or never attend) school for any of these populations. When this data was looked at specifically for Karamajong populations, nearly a quarter of all household indicated that school's lack of importance was a reason for children not attending school. For a substantial percentage of this Karamajong subpopulation, formal school has no perceived value, yet, for their society and economic structures.

## Efficiency/Effectiveness

### Outcomes

Although CBE programs target children who would not otherwise attend schools, it is likely that at least part of their success and failure will be gauged along lines traditionally emphasized for formal schools. This section discusses both indicators of these measures and their likely value for evaluating CBE programs and centers.

Evidence of efficiency and effectiveness of the CBE programs is considerable, but not easily aggregated nor quantified. In part, this is because each of the programs has slightly different goals and many of these goals do not easily lend themselves to quantitative measures. It is tempting, therefore, to try to measure effectiveness and efficiency using standard, formal education measures. Table 22 lists those measures in as far as they exist for CBE programs. It is important to note that there is no assumption that counting or documentation is standard across programs. Further, often the number reported here was for a previous year or for a subsample of students. Nevertheless, the table gives some rough idea of efficiency as captured by these standard measures.

**Table 22: Formal School Measures of Efficiency Applied to CBE Schools**

	students	% girls	% drop outs	transfer to UPE schools
MNFE	17,312	48.6%	19.0%	19.0%
COPE	11,017	46.4%	4.6%	2.8%
CHANCE	2,500	51.0%	11.9%	n/a
ABEK	21,204	56.0%	n/a	4.2%
BEUPA	3,440	54.8%	10.3%	26.4%
Aggregates	55,473	51.4%	11.5%	13.1%

Programs such as COPE and CHANCE use the UPE school curriculum with the explicit idea of facilitating student transfers to UPE schools. As such, the goal of transfers is in line with the reported measure. Other programs explicitly do not adopt the UPE school curriculum and feel that curriculum, structures, goals and methods are an alternative to UPE schools. ABEK, for example, does not target transfers as a primary goal of their program.

It is also hard to make sense of numbers such as reported dropout rates. MNFE, for example, tracks children who have left the program, but some may have moved to another district, some may have later joined UPE schools and some may be bona fide dropouts. It is important to note that some of these programs were designed specifically to educate children who otherwise could not participate in formal schooling. Their lifestyles (opportunity costs, in large part) are a major factor in keeping them from formal schools. Thus, their inconsistent attendance cannot necessarily be taken as a weakness of the program and dropout rates are generally not a valid measure of effectiveness.

BEUPA children also learn vocational skills (as do some aspects of ABEK). Reportedly, basic literacy and numeracy along with these entrepreneurial skills are highly valued among many of the children. Thus, dropping out of the program may, in fact, be a mark of its "success" in providing them with upgraded life skills that are adequate to support them.

Girls are both disproportionately benefited by the programs (comprising slightly more than half of all CBE students) and disproportionately disadvantaged for schooling among these populations. As mentioned earlier, girls' household labor is highly valued at an early age, often providing labor whose opportunity costs swamp the perceived benefits of schooling. The household survey, for example, found that all Karamajong girls who had left school said that one of the reasons they had left was to perform domestic work.

Before efficiency and effectiveness concerns can be adequately addressed, several steps need to be taken.

1. CBE programs need to define both common goals and goals which remain separate for different communities or programs.
2. Such goals need to be weighted. Which are critical to program success and which are ancillary?
3. Some measures of goal achievement need to be developed. Many of the goals are qualitative in nature. In this case, valid checklist instruments can be developed to document progress toward these goals. In the case of goals that can be quantitatively measured, other instruments might need to be developed.
4. CBE directors need to assess the appropriateness of standard UPE school measures of outcomes and success. This would include an assessment of whether standard testing (such as the P7 exam) is appropriate. Are measures of attendance rates and dropouts appropriate? Does a simple comparison of attendance rates by sex adequately capture the effectiveness of CBE programs in addressing girls' needs?
5. Programs need to agree on consistent and regularized methods of collection of such data.

Once this work has been accomplished, it may be possible to integrate CBE programs into the regular EMIS work undertaken by the MOES. At a minimum, EMIS functions of tabulating and aggregating enrollments, teacher numbers and classroom numbers ought to include these programs. Assuming that these simple counts cost no more than the same counts for UPE schools, they are included in the "cost per center" estimates given for management (see section on Administration, page 14 above).

Table 23 raises policy questions arising from the need to chart the effectiveness and efficiency of these programs. Note that the issues raised here do not replace the steps outlined just above that need to be taken by CBE program managers (or some alternative management body).

**Table 23: Outcome and Exam Policy Options**

Policy Considerations	Cost Implications
1. How will outcomes be measured? How can community development be measured? How can other community benefits be measured? What relative weights should be given to academic achievement, vocational skill development, community development and other community benefits?	Substantial anecdotal evidence exists that some or all of these centers are substantially benefiting communities far beyond academic achievement attained by pupils. This evidence needs to be compiled and validated so it can be integrated into a full assessment of benefits. As it stands, benefits of the programs are likely substantially undervalued due to lack of a valid instrument that can capture total benefits.



<p>2. How should pupil progress be measured and documented? Should students be expected to take the P7 exam? What about intermediate levels of achievement (P3, P5 for example)? Should they be measured? If academic achievement is not measured, how can progress be documented? Is documentation necessary? What kind? By whom? For whom? In what format? Available to whom?</p>	<p>Some programs have research units that attempt to measure some of the program outcomes (see, for example, several reports from MNFE). Other programs spend considerable sums documenting program processes (notably ABEK). On going research was generally included in these cost estimates so continuing these activities <u>as is</u> adds nothing to cost estimates reported here. ABEK's considerable expenditure on documentation, however, (estimated at 14.4 M last year) was not included in estimates of program expansion costs. If this documentation were to be continued for ABEK or other programs on a routine basis, those costs would have to be added. Costs of routine exams are part of the UPE regular costs and, to the extent that they are included in Central Management ongoing activities, would not represent a per/student increase in expenditures for these programs over regular UPE per/student expenditures.</p>
<p>3. Should vocational skills be an integral part of all programs? If not, who decides? How is their need assessed? Are decisions on vocational skills related to their resource costs, training costs and projected benefits to pupils? Children in urban areas do not have alternative livelihoods to fall back on if schools fail them – they likely have little or no access to agricultural, fishing or grazing –based livelihoods. Should vocational livelihoods be assumed for this population? Are resources/curriculum adequate for these needs? Are any (or all) rural children in the same situation?</p>	<p>Vocational skill costs are included here when vocational skill training is part of the existing program and included in the existing budget of programs. Once programs begin to mature, it might be useful to do a study to see how such skills are benefiting graduates and to assess how to best make resource and training decisions.</p>
<p>4. Do programs evolve over time – taking on a more community development approach at the beginning and gradually emphasizing academic achievement as they mature? If so, how can outcomes be changed to fit this evolution?</p>	<p>Formative evaluation costs are not included here except as and where they are already incorporated in existing programs. Implicitly, some of this type of evaluation probably goes on in the community development and consultative meetings. Program officers would need to decide whether existing meetings and documentation expenditures adequately cover any new or anticipated formative evaluation needs.</p>
<p>5. Will all programs be measured by a common set of criteria? How can accurate measurement be assured? Will data gathering (EMIS functions) be centralized?</p>	<p>This report assumed that management costs would grow as the program expands. The UPE management costs (about 15% of total recurrent) include EMIS and testing costs. Any measurement and data activities for these programs are included in these cost estimates assuming that such costs do not generally exceed those of UPE schools.</p>

### Community Benefits

(this section written by Robinah Kyeyune)

#### *COMMUNITY PERCEPTION OF COMPLEMENTARY PROGRAMMES*

Quantitative descriptions presented elsewhere feature reliable indicators of the achievement of the project's intended goals. Through offering education to more children who would otherwise be out of school, the programmes have achieved the reduction of illiteracy rates through the teaching of basic literacy and numeracy skills - reading and writing and counting - as well as vocational skills. Yet, beyond these the communities have observably gained much more - life skills, communication and interpersonal skills and, as reported by the beneficiaries of some programmes, better living conditions in their homes. Overall the communities report an improvement in the quality of their life. A major, though certainly not intended result of all the programmes, has been the empowerment of whole communities.

The qualitative impact of the programmes is usually described starting with evidence of seemingly personal yet significant changes in individual learners. Both ABEK and BEUPA communities, for instance, report that children are now cleaner and neater, and that they are polite in relationships with peers and elders. But there are, besides these, changes in the wider communities.

One indicator of the wider usefulness of the programmes, for example, is the communities' expression of gratitude for the relief that it has given them from various burdens. For the parents and guardians of children in poor families, it has lightened the burden of unaffordable school dues. For the children, there are now some prospects of 'going to school'. Some children like 14 year old Kasule who grew up with only his mother who was disabled had been unable to access school because their families had low income and they had, besides, to care for their relatives. CHANCE has improved their prospects of benefiting from basic education provision by not only making it affordable but also bringing it conveniently near the people.

When my grandmother died, I had to stay at home and take care of my mother and four brothers. I had never been to school before because my mother did not have money to send me to the government school and I could not leave her alone at home the whole day. I like it here because the school is near my home. During break time I can go and check on my mother and I don't have to worry about school fees. (CHANCE Project Progress Report, May 2001).

In the view of the community management committees, whole communities have been rid of the burden of

children "who were not been able to proceed with formal education" who had now "acquired some basic knowledge and skills making better citizens" (COPE, Annual Report 2001).

poor, excluded children who had no hope, many of whom were idle and some already petty criminals or threatening to be unruly (BEUPA),

BEUPA centres, wherever they have been established, have earned recognition as community development projects and are a focus for the community. Perhaps because of this perception of BEUPA, some parents/guardians want BEUPA to provide exercise books

for the children, as well as medication for malaria, a clear sign that they want more 'free' things from the project. Elsewhere, some children indicated their wish to have porridge for lunch, furniture (seats) and uniform, which perhaps indicate that they want to equate BEUPA to formal schools. The cargo cult mentality seen in some centres does not, nevertheless, seem to hinder the community's commitment to the activities of the centres.

In their respective contexts, the programmes have changed the people's outlook to life. ABEK has, for instance, persuaded its beneficiaries to see social services as a necessity and as a near inseparable part of basic education:

ABEK is everything because it brought schools, dispensaries, roads and different visitors to us.

And

A pen is mightier than a gun.

The people are reported to be singing peace and reconciliation songs. (Odada and Beyene, 2002)

The instructors/facilitators and, where they are found, the cluster leaders often describe the learning centres and whole programmes as a source of achievement, pride and identity for them. They feel that their work is rewarded with recognition and trust from the community. In addition, they exhibit outstanding ability to evaluate their experiences, articulating not only their successes with the disadvantaged learners they are responsible for but also the challenges they have met. Their work environment seems to be a learning context that they exploit fully and ably. Both instructors' and learners' evaluations of the programmes suggest why they have had such a fundamental effect on the communities. They emphasize the conducive practices on the programmes: friendly and supportive relationships between teachers and pupils, preference by both parties and insistence by management on learning rather than competing, practical, participatory, learner-centered teaching approaches and, above all, positive rather than negative discipline techniques.

The Community Project Chairpersons (CPCs) and councilors (BEUPA), management committee members (CHANCE), village or district council members (ABEK) talk about their roles and responsibilities and the changes in the centres since inception with evident pride and confidence. It is clear that they are not only committed to the project but also value their relationship with it as a source of identity, even prestige.

The overall impact of the programmes on the community may be difficult to measure in quantitative terms but it is definitely observable and seems to be, in many cases, the most important result. It may be described as the enhancement of the quality of people's lives through the provision of basic education by alternative and flexible modes. This has effectively persuaded the beneficiaries of the value of basic education. Parents (sometimes guardians) whose children have joined are alert to the significance of the choice they have made, criticizing those who have not let their children come:

Others don't come who should be here. They want to go to the other schools. They come to functions only ... when there is singing, or such things (parent, BEUPA centre, Luzira).

And CHANCE, for instance, reports that

the project has challenged the belief that parents are not prepared to support schools and has proved that the partnerships between communities, the district authorities and Save the Children is an ideal combination for achieving the goal of Universal Primary Education for all Ugandan children.

The programmes demonstrate the great possibility of a long term consequence of brightening up the lives of individuals and establishing cohesion and social empowerment in communities that were otherwise marginalized. The impact of the programmes sets before policy makers a scenario of communities battling effectively with the multiple hardships of poverty, extremely unfriendly geographical/environmental or social conditions and pressing requirements to provide basic education for their children .

#### *OWNERSHIP*

Having developed a sense of belonging with the learning centres, the people show good evidence of their ownership of the programmes. The establishment and effective operation of the centres depends a lot on the awareness, availability, physical efforts and kindness of the communities.

During a recent Project Progress Review (Report in process) BEUPA centres were found on the kind offers of family homes, compounds, business premises (including bars for the day!) and other contributions like porridge for mid-morning refreshment and furniture for the children. This has been the direct result of the mobilization of parish communities by project management facilitated by Local Council Chairpersons. Besides the material support, the project committee members provide supervision and inspection services and together with the project management sort out issues at the centres, including instructor and learner attendance, material needs and learning achievement.

ABEK is proud of active village committees close to the learning centres who approve the project to the communities. The district committees actively ensure the smooth operation of the centres. Learners are reported to be satisfied that there has been an improvement in the conditions at the centres, the village communities having arranged some stones and logs for seats rather than having the children sit on the bare ground (Odada and Beyene, 2002).

An interesting picture of partnership is painted by the response of communities in Nakasongola district. Community efforts here have resulted in the establishment of 19 CHANCE centres, in addition to those started by Save the Children, in response to the large number of children still out of school. During the hard times of drought, when pastoralist communities have to migrate, the families meet to decide where to shift the centres without pushing any child out of school. At other times, depending on the planting or harvest activities, parents still determine when the children should come. They are keen to ensure that despite the communities' life style the centres are still operational. Besides making small contributions to facilitate the instructors in recognition of their time and personal effort, individual parents/guardians routinely supervise attendance and teaching. They also monitor the children's learning progress and discuss their reports at regular meetings with the management committees that must have a membership of at least four women, one of whom must be the president or treasurer.

In COPE too there is a high level of community ownership observable especially in the mobilization efforts, which have resulted in the construction of classrooms. These, however, tend to dwindle in the face of untimely release or lack of funds at the district or national level.

All in all it may be said that the programmes exhibit a relationship with the communities that is quite rare in the case of regular schools.

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## Appendix II: Cost Projections of Cost Packages

### Cost projections for Complimentary Education Programs - Low Cost Estimate

(In thousands of 2002 Ugandan Shillings)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Rural - dispersed communities</b>											
Ongoing costs	572,920	594,342	616,565	639,620	663,536	688,347	714,086	740,787	768,486	797,221	827,030
Investment Costs	2,722,508	2,824,308	2,929,913	3,039,468	3,153,119	3,271,019	3,393,329	3,520,211	3,651,838	3,788,386	3,930,041
Total	3,295,428	3,418,650	3,546,479	3,679,088	3,816,655	3,959,367	4,107,414	4,260,998	4,420,324	4,585,607	4,757,071
<b>Urban poor communities</b>											
Ongoing costs	169,402	195,608	225,868	260,809	301,155	347,743	401,538	463,654	535,380	618,202	713,836
Investment Costs	873,959	1,009,158	1,165,271	1,345,535	1,553,685	1,794,036	2,071,567	2,392,032	2,762,072	3,189,356	3,682,740
Total	1,043,361	1,204,765	1,391,139	1,606,344	1,854,840	2,141,778	2,473,105	2,855,687	3,297,452	3,807,558	4,396,576
<b>Rural - consolidated communities</b>											
Ongoing costs	1,466,613	1,892,483	2,442,017	3,151,122	4,066,135	5,246,847	6,770,411	8,736,382	11,273,226	14,546,711	18,770,741
Investment Costs	5,860,803	7,562,645	9,758,662	12,592,353	16,248,882	20,967,184	27,055,571	34,911,885	45,049,493	58,130,828	75,010,681
Total	7,327,415	9,455,128	12,200,679	15,743,475	20,315,017	26,214,031	33,825,981	43,648,267	56,322,719	72,677,539	93,781,422
<b>Total</b>											
Ongoing costs	2,208,934	2,682,433	3,284,450	4,051,551	5,030,827	6,282,937	7,886,034	9,940,823	12,577,092	15,962,134	20,311,607
Investment Costs	9,457,270	11,396,110	13,853,847	16,977,356	20,955,687	26,032,239	32,520,467	40,824,129	51,463,403	65,108,571	82,623,462
Total	11,666,204	14,078,543	17,138,297	21,028,907	25,986,513	32,315,176	40,406,501	50,764,951	64,040,495	81,070,704	102,935,069
<b>Total - with 5% annual inflation</b>											
Ongoing costs	2,319,381	2,957,382	3,802,161	4,924,685	6,420,751	8,419,737	11,096,442	14,687,123	19,511,198	26,000,634	34,739,741
Investment Costs	9,930,133	12,564,211	16,037,560	20,636,082	26,745,356	34,885,690	45,759,562	60,315,831	79,836,629	106,055,001	141,314,159
Total	12,249,514	15,521,593	19,839,721	25,560,768	33,166,108	43,305,426	56,856,004	75,002,954	99,347,827	132,055,635	176,053,900

Note: Ongoing costs are generally budgeted in the recurrent budget; Investment costs are generally budgeted in the development budget

# **Cost projections for Complimentary Education Programs - Upgraded Quality Cost Estimate**

(In thousands of 2002 Ugandan Shillings)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Rural - dispersed communities</b>												
Ongoing costs	828,570	859,552	891,692	925,034	959,623	995,505	1,032,729	1,071,344	1,111,403	1,152,961	1,196,072	1,240,795
Investment costs	3,834,925	3,978,320	4,127,076	4,281,395	4,441,483	4,607,558	4,779,843	4,958,569	5,143,979	5,336,321	5,535,856	5,742,851
Total	4,663,496	4,837,872	5,018,768	5,206,429	5,401,106	5,603,063	5,812,571	6,029,913	6,255,382	6,489,282	6,731,928	6,983,646
<b>Urban poor communities</b>												
Ongoing costs	216,087	249,515	288,115	332,685	384,151	443,577	512,198	591,433	682,926	788,572	910,562	1,051,423
Investment costs	1,253,468	1,447,375	1,671,280	1,929,821	2,228,359	2,573,079	2,971,126	3,430,750	3,961,477	4,574,305	5,281,936	6,099,035
Total	1,469,555	1,696,891	1,959,394	2,262,507	2,612,509	3,016,656	3,483,324	4,022,183	4,644,403	5,362,877	6,192,498	7,150,458
<b>Rural - consolidated communities</b>												
Ongoing costs	1,917,464	2,474,252	3,192,717	4,119,809	5,316,107	6,859,781	8,851,704	11,422,035	14,738,731	19,018,519	24,541,058	31,667,217
Investment costs	8,210,193	10,594,243	13,670,568	17,640,186	22,762,489	29,372,192	37,901,200	48,906,835	63,108,254	81,433,437	105,079,831	135,592,594
Total	10,127,657	13,068,495	16,863,285	21,759,995	28,078,596	36,231,973	46,752,904	60,328,870	77,846,984	100,451,956	129,620,890	167,259,811
<b>Total</b>												
Ongoing costs	2,962,122	3,583,319	4,372,524	5,377,528	6,659,880	8,298,864	10,396,630	13,084,812	16,533,060	20,960,052	26,647,692	33,959,435
Investment costs	13,298,585	16,019,938	19,468,923	23,851,402	29,432,331	36,552,829	45,652,169	57,296,155	72,213,710	91,344,063	115,897,623	147,434,480
Total	16,260,708	19,603,258	23,841,448	29,228,930	36,092,211	44,851,693	56,048,799	70,380,967	88,746,769	112,304,115	142,545,315	181,393,915
<b>Total - with 5% annual inflation</b>												
Ongoing costs	3,110,228	3,950,610	5,061,744	6,536,419	8,499,882	11,121,271	14,629,102	19,332,226	25,648,202	34,141,715	45,576,597	60,986,266
Investment costs	13,963,515	17,661,982	22,537,712	28,991,528	37,563,942	48,984,287	64,237,186	84,652,516	112,027,165	148,789,854	198,224,266	264,771,144
Total	17,073,743	21,612,592	27,599,456	35,527,947	46,063,824	60,105,558	78,866,289	103,984,743	137,675,367	182,931,569	243,800,863	325,757,409

Note: Ongoing costs are generally budgeted in the recurrent budget; Investment costs are generally budgeted in the development budget

### Cost projections for Complimentary Education Programs - UPE Cost Estimates

(In thousands of 2002 Ugandan Shillings)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Rural - dispersed communities</b>												
Ongoing costs	925,768	960,384	996,294	1,033,547	1,072,193	1,112,285	1,153,875	1,197,020	1,241,779	1,288,211	1,336,380	1,386,349
Investment costs	4,287,812	4,448,141	4,614,464	4,787,007	4,966,002	5,151,689	5,344,320	5,544,153	5,751,459	5,966,516	6,189,614	6,421,055
Total	5,213,580	5,408,524	5,610,758	5,820,554	6,038,195	6,263,974	6,498,195	6,741,173	6,993,238	7,254,727	7,525,994	7,807,404
<b>Urban poor communities</b>												
Ongoing costs	190,485	219,953	253,979	293,269	338,636	391,022	451,512	521,360	602,013	695,142	802,679	926,850
Investment costs	1,462,816	1,689,109	1,950,409	2,252,132	2,600,530	3,002,823	3,467,351	4,003,739	4,623,105	5,338,286	6,164,102	7,117,669
Total	1,653,302	1,909,062	2,204,388	2,545,400	2,939,166	3,393,846	3,918,863	4,525,099	5,225,118	6,033,428	6,966,780	8,044,520
<b>Rural - consolidated communities</b>												
Ongoing costs	1,743,710	2,250,043	2,903,404	3,746,486	4,834,379	6,238,171	8,049,592	10,387,008	13,403,156	17,295,124	22,317,229	28,797,639
Investment costs	8,210,193	10,594,243	13,670,568	17,640,186	22,762,489	29,372,192	37,901,200	48,906,835	63,108,254	81,433,437	105,079,831	135,592,594
Total	9,953,903	12,844,287	16,573,972	21,386,671	27,596,868	35,610,363	45,950,792	59,293,843	76,511,410	98,728,561	127,397,061	164,390,233
<b>Total</b>												
Ongoing costs	2,859,963	3,430,380	4,153,677	5,073,301	6,245,208	7,741,478	9,654,979	12,105,388	15,246,948	19,278,477	24,456,287	31,110,838
Investment costs	13,960,821	16,731,494	20,235,442	24,679,325	30,329,021	37,526,704	46,712,871	58,454,728	73,482,818	92,738,238	117,433,547	149,131,318
Total	16,820,784	20,161,873	24,389,118	29,752,626	36,574,229	45,268,182	56,367,850	70,560,116	88,729,765	112,016,715	141,889,835	180,242,156
<b>Total - with 5% annual inflation</b>												
Ongoing costs	3,002,961	3,781,994	4,808,400	6,166,630	7,970,644	10,374,321	13,585,525	17,885,172	23,653,020	31,402,608	41,828,551	55,870,596
Investment costs	14,658,862	18,446,472	23,425,053	29,997,873	38,708,370	50,289,373	65,729,700	86,364,256	113,995,969	151,060,818	200,851,218	267,818,421
Total	17,661,823	22,228,465	28,233,453	36,164,503	46,679,014	60,663,694	79,315,225	104,249,428	137,648,989	182,463,426	242,679,769	323,689,016

Note: Ongoing costs are generally budgeted in the recurrent budget; Investment costs are generally budgeted in the development budget